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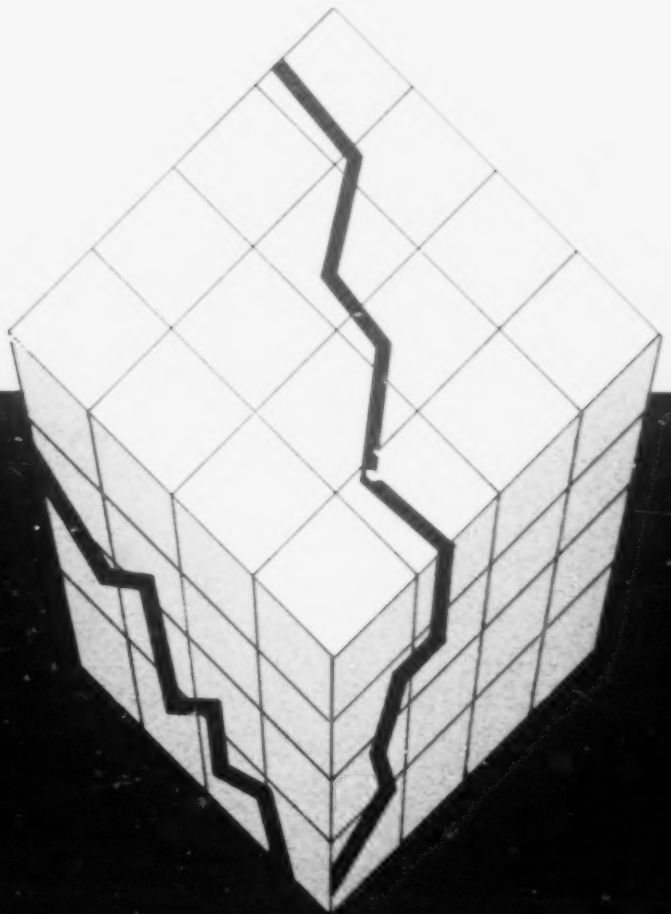

Sales of Natural Gas Liquids and Liquefied Refinery Gases

American Petroleum Institute

NPGA National Propane Gas Association

GPA Gas Processors Association

1992 Sales of Natural Gas Liquids and Liquefied Refinery Gases

Finance, Accounting and
Statistics Department
October 1993

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METHODOLOGICAL REVISIONS

Sales of Natural Gas Liquids and Liquefied Refinery Gases contains sales estimates made by API based on reports submitted by over 1,875 producers and gas distribution companies in the U.S. With this year's report, API has made a modification in the methodology used to factor up company-reported sales volumes to their respective published totals. The change affects both the end-use and geographical distribution for butanes and pentanes plus. It has no impact on national totals published for these products. And it has no impact whatsoever on ethane or propane estimates. To provide for historical comparability, API has revised butane and pentanes plus data back to 1989--the first year for which there is sufficient data to support the new methodology.

To summarize the change. . . .in the past, API factored up the sum of "reported sales and reported motor gasoline blending" to the sum of "DOE/EIA's published deliveries and refinery inputs." Beginning this year, API will factor "sales" to "deliveries," and "motor gasoline blending" to "refinery inputs." For motor gasoline blending, API published figures will now match DOE/EIA's published figures at both the PADD and national level.

Preface

The ***1992 Sales of Natural Gas Liquids and Liquefied Refinery Gases*** presents results from the ninth annual survey jointly sponsored by the American Petroleum Institute (API), the Gas Processors Association (GPA), and the National PROPANE GAS Association (NPGA). As its title indicates, this publication reports on **sales** of NGL/LRGs, not **consumption**. The figures published in this report are estimates based on annual sales reports filed by over 1,875 producers and gas distribution companies.

Sales of natural gas liquids and liquefied refinery gases (including internal use and motor gasoline blending) totalled 37.1 billion gallons in 1992. This represents an increase of 1.3 billion gallons (3.7 percent) versus 1991. 1992 saw growth for all product groups. Propane was up 5.5 percent, year to year. Ethane, butane, and pentanes plus grew by 1.0 percent, 4.0 percent, and 2.8 percent respectively.

According to the survey data, chemical usage rose 3.5 percent, industrial usage increased 74.9 percent, and farm use increased 20.2 percent. The other four sectors, residential and commercial, internal-combustion, gas utility, and other uses decreased 2.1, 7.9, 7.9, and 26.6 percent, respectively. NGL use for motor gasoline blending fell a modest 0.4 percent for the year; the 1.9 percent increase in butane blending was offset by a 4.4 percent decline in blending of pentanes plus.

The following table illustrates the percentage distribution of total sales by sector for both 1992 and 1991.

Sector	1992 %	1991 %
Residential & Commercial	14.1	14.9
Internal-Combustion Fuel	1.3	1.5
Chemical	50.9	51.0
Industrial	6.8	4.0
Gas Utility	0.6	0.7
Farm	3.7	3.2
Other	3.2	4.5
Gasoline Blending	19.4	20.2
Total	100.0	100.0

Washington, D.C.
October 1993

The ten states which had the largest volumes of sales are ranked below. Their sales came to 30.1 billion gallons or 81.0 percent of the total national volume.

Rank	State	Volume (M/gals)	% of Total
1.	Texas	18,474,578	49.8
2.	Louisiana	3,611,569	9.7
3.	California	1,863,738	5.0
4.	Kansas	1,755,770	4.7
5.	Illinois	1,412,413	3.8
6.	Michigan	835,779	2.3
7.	Ohio	659,569	1.8
8.	New Mexico	520,845	1.4
9.	North Carolina	467,848	1.3
10.	Washington	462,816	1.2
	Total	30,064,925	81.0

TABLE 1. Sales of Natural Gas Liquids and Liquefied Refinery Gases in the United States, 1992 and 1991 (revised) (Thousands of Gallons)

Category	1992	1991	VOLUME CHANGE	% CHANGE
Product Type:				
Ethane 1/.....	8,816,388	8,729,322	87,066	1.0
Propane 2/.....	15,869,658	15,046,920	822,738	5.5
Butane 3/.....	7,039,956	6,766,536	273,420	4.0
Pentanes Plus 4/.....	5,399,856	5,253,024	146,832	2.8
United States Total	37,125,858	35,795,802	1,330,056	3.7
Principal Uses:				
Residential & Commercial	5,215,142	5,325,265	-110,123	-2.1
Internal-Combustion Fuel	500,092	543,116	-43,024	-7.9
Chemical/Industrial:				
Chemical 5/6/.....	18,905,319	18,265,364	639,955	3.5
Industrial 7/.....	2,533,874	1,448,468	1,085,406	74.9
Gas Utility	218,513	237,232	-18,719	-7.9
Farm	1,363,327	1,133,840	229,487	20.2
Other 8/.....	1,179,199	1,605,791	-426,592	-26.6
Gasoline Blending	7,210,392	7,236,726	-26,334	-0.4
United States Total	37,125,858	35,795,802	1,330,056	3.7

TABLE 1. Sales of Natural Gas Liquids and Liquefied Refinery Gases in the United States, 1990 (revised) and 1989 (revised) (Thousands of Gallons)

Category	1990	1989	VOLUME CHANGE	% CHANGE
Product Type:				
Ethane 1/.....	7,823,550	7,198,422	625,128	8.7
Propane 2/.....	14,059,584	15,343,608	-1,284,024	-8.4
Butane 3/.....	6,456,240	7,863,534	-1,407,294	-17.9
Pentanes Plus 4/.....	4,955,622	4,682,286	273,336	5.8
United States Total	33,294,996	35,087,850	-1,792,854	-5.1
Principal Uses:				
Residential & Commercial	4,975,233	5,390,564	-415,331	-7.7
Internal-Combustion Fuel	531,991	581,538	-49,547	-8.5
Chemical/Industrial:				
Chemical 5/6/.....	16,414,046	15,767,225	646,821	4.1
Industrial 7/.....	1,489,979	2,460,498	-970,519	-39.4
Gas Utility	280,877	302,435	-21,558	-7.1
Farm	1,135,938	1,172,963	-37,025	-3.2
Other 8/.....	1,307,780	2,003,323	-695,543	-34.7
Gasoline Blending	7,159,152	7,409,304	-250,152	-3.4
United States Total	33,294,996	35,087,850	-1,792,854	-5.1

1/ Includes ethylene.
2/ Includes propylene.
3/ Includes isobutane and butylene.
4/ Includes isopentane, natural gasoline and plant condensate. Excludes field condensate.
5/ Includes use in synthetic rubber manufacture.
6/ The reported data strongly suggest that this category includes not only ethane, propane, butane and pentanes plus consumed as chemical feedstocks, but some refinery olefins and chemical plant fuel usage.
7/ Includes refinery fuel use.
8/ Includes use as synthetic natural gas feedstock and use in secondary recovery projects.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Table 2. Sales of Natural Gas Liquids and Liquefied Refinery Gases by Product Type, PAD District and State, 1992 and 1991 (Thousands of Gallons)

District & State	Ethane		Propane		Butane	
	1992	1991	1992	1991	1992	1991
PAD Dist. I						
New England						
Connecticut...	-	-	79,151	61,854	-	W
Maine.....	-	-	51,816	61,931	-	-
Massachusetts.	-	-	78,508	80,581	-	-
New Hampshire.	-	-	73,980	69,395	-	-
Rhode Island..	-	-	19,153	19,560	-	-
Vermont.....	-	-	80,314	68,632	-	-
Central Atlantic						
Delaware.....	-	-	38,831	40,699	W	W
Maryland/D.C..	-	-	110,997	84,823	-	W
New Jersey....	-	-	249,564	231,479	65,320	24,218
New York.....	-	-	297,191	301,623	W	W
Pennsylvania..	-	-	385,396	318,480	W	35,820
Lower Atlantic						
Florida.....	-	-	334,520	334,242	W	W
Georgia.....	-	-	301,753	282,059	-	W
North Carolina	-	-	465,845	432,797	-	W
South Carolina	-	-	151,066	151,470	-	-
Virginia.....	-	-	233,817	195,020	-	W
West Virginia.	-	-	36,443	76,479	-	-
Total.....	-	-	2,988,343	2,811,124	93,910	69,531
PAD Dist. II						
Illinois.....	W	273,308	501,630	318,177	807,939	491,967
Indiana.....	-	-	295,889	398,160	W	162,940
Iowa.....	W	W	375,207	302,051	W	W
Kansas.....	400,760	102,957	235,197	303,417	325,674	599,373
Kentucky.....	W	W	243,941	253,939	W	W
Michigan.....	-	-	645,344	614,813	93,252	105,429
Minnesota.....	-	-	336,316	276,440	W	18,441
Missouri.....	-	-	355,723	361,803	-	W
Nebraska.....	-	-	135,442	133,034	-	-
North Dakota..	-	-	74,391	85,069	W	W
Ohio.....	-	-	559,279	466,520	92,311	43,710
Oklahoma.....	5,943	4,542	170,299	192,629	98,852	113,603
South Dakota..	-	-	81,072	75,352	-	-
Tennessee.....	-	-	142,545	134,555	W	W
Wisconsin.....	-	-	326,745	355,538	-	W
Total.....	417,895	390,945	4,479,020	4,271,497	1,620,275	1,622,885
PAD Dist. III						
Alabama.....	-	-	150,883	159,868	19,627	4,941
Arkansas.....	-	-	126,507	138,802	-	W
Louisiana.....	1,065,858	966,706	916,120	975,671	1,217,815	1,229,759
Mississippi...	W	-	260,453	253,793	21,897	19,198
New Mexico....	229,911	222,775	175,809	206,005	43,586	72,900
Texas.....	7,102,612	7,136,960	5,528,070	4,968,800	2,848,352	2,722,205
Total.....	8,398,382	8,326,441	7,157,842	6,702,939	4,151,277	4,049,185
PAD Dist. IV						
Colorado.....	-	W	124,242	136,587	W	32,117
Idaho.....	-	-	28,118	34,176	-	-
Montana.....	-	-	40,877	44,245	100,174	W
Utah.....	-	-	27,902	31,155	59,646	87,775
Wyoming.....	W	-	42,944	50,795	28,286	12,017
Total.....	111	663	264,083	296,958	197,921	232,172
PAD Dist. V						
Alaska.....	-	-	16,521	16,870	-	-
Arizona.....	-	-	85,593	69,738	W	8,053
California....	-	W	654,989	652,381	621,453	454,857
Hawaii.....	-	-	W	W	W	-
Nevada.....	-	-	42,395	48,575	-	-
Oregon.....	-	-	60,057	65,457	W	-
Washington....	-	-	96,050	102,414	349,202	328,953
Total.....	-	11,273	980,370	964,402	976,573	792,763
U.S. Total.....	8,816,388	8,729,322	15,869,658	15,046,920	7,039,956	6,766,536

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Pentanes Plus 1992	Pentanes Plus 1991	Total 1992	Total 1991	District & State
				PAD Dist. I
				New England
-	W	79,151	62,387	...Connecticut
-	-	51,816	61,931	.....Maine
-	W	78,508	80,649	.Massachusetts
-	-	73,980	69,395	.New Hampshire
-	-	19,153	19,560	..Rhode Island
-	-	80,314	68,632	.....Vermont
				Central Atlantic
-	-	41,171	46,121	.....Delaware
W	W	111,708	85,031	.Maryland/D.C.
W	W	318,468	260,874	....New Jersey
W	W	301,282	303,176	.....New York
W	W	418,384	361,676	..Pennsylvania
				Lower Atlantic
-	W	335,961	336,706	.....Florida
W	W	304,280	286,853	.....Georgia
W	W	467,848	434,929	North Carolina
W	W	152,300	152,511	South Carolina
W	W	234,616	195,914	.....Virginia
W	W	38,068	77,435	.West Virginia
24,755	23,125	3,107,008	2,903,780	.....Total
				PAD Dist. II
W	70,938	1,412,413	1,154,390	.....Illinois
W	W	377,904	606,651	.....Indiana
W	W	381,110	313,084	.....Iowa
794,139	1,078,313	1,755,770	2,084,060	.....Kansas
W	W	311,849	347,670	.....Kentucky
97,183	107,288	835,779	827,530	.....Michigan
W	W	358,843	296,027	.....Minnesota
W	W	357,022	364,369	.....Missouri
W	W	135,998	133,626	.....Nebraska
W	W	75,575	99,273	..North Dakota
W	W	659,569	518,406	.....Ohio
40,792	47,012	315,886	357,786	.....Oklahoma
-	-	81,072	75,352	..South Dakota
W	W	202,800	136,729	.....Tennessee
W	W	327,623	356,057	.....Wisconsin
1,072,023	1,385,683	7,589,213	7,671,010	.....Total
				PAD Dist. III
W	W	172,858	167,144	.....Alabama
W	W	129,571	141,687	.....Arkansas
411,776	343,526	3,611,569	3,515,662	.....Louisiana
101,751	W	384,102	476,923	...Mississippi
71,539	112,189	520,845	613,869	....New Mexico
2,995,544	2,527,835	18,474,578	17,355,800	.....Texas
3,586,022	3,192,520	23,293,523	22,271,085	.....Total
				PAD Dist. IV
3,562	7,376	137,619	176,743	.....Colorado
-	-	28,118	34,176	.....Idaho
W	-	141,107	144,508	.....Montana
64,524	72,282	152,072	191,212	.....Utah
28,262	18,047	99,603	80,859	.....Wyoming
96,404	97,705	558,519	627,498	.....Total
				PAD Dist. V
-	W	16,521	17,802	.....Alaska
W	W	88,516	78,864	.....Arizona
587,296	552,277	1,863,738	1,670,788	....California
W	-	42,673	8,967	.....Hawaii
W	W	42,546	48,926	.....Nevada
-	-	60,785	65,457	.....Oregon
W	W	462,816	431,625	....Washington
620,652	553,991	2,577,595	2,322,429	.....Total
5,399,856	5,253,024	37,125,858	35,795,802	.....U.S. Total

Table 3. Sales of Natural Gas Liquids and Liquefied Refinery Gases, by End Use, PAD District and State, 1992 and 1991 (Thousands of Gallons)

District & State	Residential & Commercial 1992	Residential & Commercial 1991	Internal Combustion Fuel 1992	Internal Combustion Fuel 1991	Chemical 1/ 1992	Chemical 1/ 1991	Industrial 2/ 1992	Industrial 2/ 1991
PAD Dist. I								
New England								
Connecticut...	60,280	46,955	3,194	3,941	W	W	11,322	6,939
Maine.....	37,890	46,389	1,516	1,668	W	W	10,270	11,336
Massachusetts.	60,231	60,726	6,270	6,785	-	W	9,407	7,233
New Hampshire.	63,516	60,713	955	907	-	-	5,183	5,488
Rhode Island..	13,210	13,814	1,371	1,437	-	-	3,855	3,772
Vermont.....	70,363	58,691	1,053	1,072	W	-	7,321	6,493
Central Atlantic								
Delaware.....	30,533	31,168	582	619	W	W	1,339	3,162
Maryland/D.C..	67,532	60,092	10,108	4,213	W	W	21,252	11,569
New Jersey....	65,071	54,732	7,520	6,850	149,854	172,710	48,044	21,201
New York.....	245,305	249,558	14,189	15,561	415	556	20,386	22,200
Pennsylvania..	153,601	145,289	18,646	18,491	W	W	66,361	66,970
Lower Atlantic								
Florida.....	256,382	255,049	16,477	17,622	W	-	23,271	24,624
Georgia.....	198,616	180,396	10,864	11,046	W	W	31,643	30,122
North Carolina	265,676	236,667	14,174	18,291	W	W	46,360	40,778
South Carolina	104,594	97,322	8,553	9,396	W	W	13,765	18,576
Virginia.....	120,042	114,643	10,108	9,950	36,130	W	26,705	28,359
West Virginia.	22,447	19,460	2,115	1,699	W	44,650	6,207	8,011
Total.....	1,835,289	1,731,664	127,695	129,548	317,532	290,703	352,691	316,833
PAD Dist. II								
Illinois.....	180,879	187,593	31,540	30,716	50,333	184,016	173,398	34,209
Indiana.....	169,097	172,440	15,992	15,669	W	W	16,868	14,705
Iowa.....	168,031	165,960	4,523	4,837	W	W	16,078	16,148
Kansas.....	53,299	64,475	9,772	10,694	268,885	186,594	180,947	65,183
Kentucky.....	100,136	106,330	5,609	5,171	W	W	131,777	142,299
Michigan.....	362,213	358,153	24,789	25,795	W	48,960	73,747	65,070
Minnesota.....	175,925	157,427	5,323	5,091	W	W	31,897	29,212
Missouri.....	273,971	271,211	8,680	12,834	W	W	43,824	47,369
Nebraska.....	61,522	60,631	4,684	6,358	W	W	5,969	7,220
North Dakota..	53,416	48,213	1,601	1,488	W	W	585	780
Ohio.....	196,990	219,927	24,828	28,741	W	W	199,126	46,386
Oklahoma.....	54,925	67,851	7,898	10,721	20,006	26,272	92,555	91,140
South Dakota..	49,729	52,443	1,823	1,344	-	-	1,274	1,482
Tennessee.....	103,488	95,646	11,829	13,311	60,378	W	16,818	17,032
Wisconsin.....	244,578	258,948	11,891	13,752	W	W	18,723	30,238
Total.....	2,248,199	2,287,248	170,782	186,522	605,372	750,318	1,003,586	608,273
PAD Dist. III								
Alabama.....	109,362	114,221	8,365	9,249	W	W	11,030	12,768
Arkansas.....	74,039	82,693	6,098	7,735	W	W	6,060	5,612
Louisiana.....	52,254	40,753	6,351	7,307	2,119,742	2,122,248	49,051	17,948
Mississippi...	86,167	92,018	9,092	10,788	125,825	W	22,302	13,038
New Mexico....	54,155	66,679	9,852	7,910	W	439,611	12,132	7,893
Texas.....	170,388	199,629	30,587	34,018	15,128,702	14,448,388	590,228	127,071
Total.....	546,365	595,993	70,345	77,007	17,802,257	17,134,151	690,803	184,310
PAD Dist. IV								
Colorado.....	83,621	93,855	6,696	8,158	W	728	34,266	34,397
Idaho.....	14,693	18,608	3,562	3,915	-	-	2,266	2,549
Montana.....	29,544	34,752	3,473	4,711	W	-	5,367	W
Utah.....	16,505	20,501	3,889	4,333	W	-	6,055	4,709
Wyoming.....	25,022	29,406	2,677	4,838	W	W	12,143	14,374
Total.....	169,385	196,922	20,297	25,955	7,319	836	60,097	59,900
PAD Dist. V								
Alaska.....	15,770	15,966	384	431	-	-	W	W
Arizona.....	46,365	43,090	5,589	5,573	W	W	18,909	18,899
California....	237,298	343,520	64,227	74,889	172,016	88,574	356,927	210,291
Hawaii.....	W	W	W	W	-	-	W	W
Nevada.....	31,249	36,236	2,405	2,042	W	W	5,454	5,111
Oregon.....	21,341	24,117	14,423	15,575	-	-	15,585	16,698
Washington....	43,476	44,034	20,443	24,212	W	W	26,190	27,005
Total.....	415,904	513,438	110,973	124,084	172,839	89,356	426,697	279,152
U.S. Total.....	5,215,142	5,325,265	500,092	543,116	18,905,319	18,265,364	2,533,874	1,448,468

1/ The reported data strongly suggest that this category includes not only ethane, propane, butane and pentanes plus consumed as chemical feedstocks, but some refinery olefins and chemical plant fuel usage.
2/ Includes sales for refinery fuel use and synthetic rubber manufacture.
3/ Includes use as synthetic natural gas feedstock, and use in secondary recovery of petroleum.

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Gas Utility		Farm		Other 3/		Total		
1992	1991	1992	1991	1992	1991	1992	1991	District & State
								PAD Dist. I
								New England
W	-	2,254	2,223	W	W	79,151	62,387	...Connecticut
710	1,050	201	249	292	255	51,816	61,931	.....Maine
1,822	4,600	524	906	254	W	78,508	80,649	.Massachusetts
W	W	3,793	61	W	1,887	73,980	69,395	.New Hampshire
-	-	675	505	W	W	19,153	19,560	..Rhode Island
W	W	1,131	747	W	W	80,314	68,632	.....Vermont
								Central Atlantic
-	-	6,319	5,617	W	W	38,831	46,121	.....Delaware
1,310	W	10,473	7,569	W	587	111,708	85,031	.Maryland/D.C.
7,673	586	1,637	1,196	730	2,678	280,529	259,953	....New Jersey
3,838	3,578	10,572	7,929	2,618	3,417	297,323	302,799	.....New York
W	W	27,107	22,019	9,108	6,901	397,543	325,365	..Pennsylvania
								Lower Atlantic
W	W	16,858	15,047	1,645	4,566	335,646	336,179	.....Florida
443	W	59,039	56,044	1,148	5,750	304,280	286,853	.....Georgia
W	1,334	136,960	129,690	1,438	5,972	467,848	434,929	North Carolina
-	W	23,255	23,610	829	1,228	152,300	152,511	South Carolina
W	W	36,232	35,831	5,321	5,613	234,616	195,914	.....Virginia
-	-	5,091	3,126	W	W	38,068	77,435	.West Virginia
41,195	36,854	342,121	312,369	25,091	47,673	3,041,614	2,865,644	.....Total
								PAD Dist. II
W	129,064	102,025	65,606	5,209	4,387	544,658	635,591	.....Illinois
W	W	88,496	64,315	4,667	5,538	300,142	403,676	.....Indiana
-	-	181,814	110,610	4,668	4,370	381,110	313,084	.....Iowa
W	W	26,677	30,219	506,256	853,996	1,159,410	1,238,327	.....Kansas
W	W	18,896	13,651	2,341	1,980	276,917	289,335	.....Kentucky
W	8,952	40,877	28,105	235,598	242,779	796,116	777,814	.....Michigan
W	W	120,961	82,175	2,062	2,985	337,492	278,115	.....Minnesota
398	707	23,827	24,115	5,023	6,356	357,022	364,369	.....Missouri
-	-	62,877	58,734	121	91	135,998	133,626	.....Nebraska
-	W	12,451	8,497	6,338	6,678	75,055	85,923	..North Dakota
W	W	67,355	42,741	5,944	6,358	622,763	475,214	.....Ohio
W	-	17,676	16,111	5,952	9,231	199,105	221,326	.....Oklahoma
W	W	26,821	19,930	1,411	137	81,072	75,352	..South Dakota
W	W	6,196	5,503	4,067	3,190	202,800	136,729	.....Tennessee
24	W	49,369	49,945	2,351	2,835	327,623	356,057	.....Wisconsin
131,018	181,009	846,318	620,257	792,008	1,150,911	5,797,283	5,784,538	.....Total
								PAD Dist. III
W	W	20,709	21,813	1,332	1,538	168,986	162,104	.....Alabama
-	-	38,061	38,034	2,249	4,700	129,571	141,687	.....Arkansas
-	-	9,619	12,977	201,627	43,561	2,438,644	2,244,794	.....Louisiana
-	W	17,075	17,182	1,157	6,039	261,618	257,948	...Mississippi
W	W	3,658	2,620	12,138	64,302	503,666	596,325	....New Mexico
3,210	-	27,486	36,773	109,933	245,582	16,050,534	15,091,461	.....Texas
8,185	7,737	116,608	129,399	328,436	365,722	19,562,999	18,494,319	.....Total
								PAD Dist. IV
-	-	8,184	8,658	957	3,217	133,903	149,013	.....Colorado
-	-	1,815	2,029	W	W	28,118	34,176	.....Idaho
W	-	2,493	317	W	W	42,791	44,245	.....Montana
W	-	991	1,145	1,414	W	29,756	31,401	.....Utah
W	-	2,454	1,546	613	1,375	50,111	51,647	.....Wyoming
2,370	-	15,937	13,695	9,274	13,174	284,679	310,482	.....Total
								PAD Dist. V
W	W	W	W	-	-	16,521	16,870	.....Alaska
W	-	2,376	3,241	W	W	88,284	71,561	.....Arizona
15,286	11,284	24,677	39,026	16,205	15,457	886,636	783,041	....California
-	W	W	W	W	W	27,338	8,967	.....Hawaii
-	-	1,399	1,014	W	W	42,546	48,926	.....Nevada
W	-	5,836	6,774	W	2,293	60,057	65,457	.....Oregon
W	-	7,987	7,968	2,794	5,794	107,509	109,271	....Washington
35,745	11,632	42,343	58,120	24,390	28,311	1,228,891	1,104,093	.....Total
218,513	237,232	1,363,327	1,133,840	1,179,199	1,605,791	29,915,466	28,559,076	.....U.S. Total

Table 4. Sales of Propane, by Use, in the United States, by PAD District and State, 1992 and 1991 (Thousands of Gallons)

District & State	Residential & Commercial 1992	Residential & Commercial 1991	Internal Combustion Fuel 1992	Internal Combustion Fuel 1991	Chemical 1/ 1992	Chemical 1/ 1991	Industrial 2/ 1992	Industrial 2/ 1991
PAD Dist. I								
New England								
Connecticut	60,280	46,955	3,194	3,941	W	W	11,322	6,939
Maine	37,890	46,389	1,516	1,668	W	W	10,270	11,336
Massachusetts	60,231	60,726	6,270	6,785	-	-	9,407	7,233
New Hampshire	63,516	60,713	955	907	-	-	5,183	5,488
Rhode Island	13,210	13,814	1,371	1,437	-	-	3,855	3,772
Vermont	70,363	58,691	1,053	1,072	W	-	7,321	6,493
Central Atlantic								
Delaware	30,533	31,168	582	619	W	W	1,339	3,162
Maryland/D.C.	67,532	60,092	10,108	4,213	-	-	21,252	11,569
New Jersey	65,071	54,732	7,520	6,850	W	W	47,574	21,201
New York	245,305	249,558	14,189	15,561	W	W	20,386	22,200
Pennsylvania	153,601	145,289	18,646	18,491	W	W	66,361	66,970
Lower Atlantic								
Florida	256,382	255,049	16,477	17,622	-	-	23,271	24,624
Georgia	198,616	180,396	10,864	11,046	-	-	31,643	30,122
North Carolina	265,676	236,667	14,174	18,291	W	W	46,360	40,778
South Carolina	104,594	97,322	8,553	9,396	W	-	13,765	18,576
Virginia	120,042	114,643	10,108	9,950	W	W	26,705	28,359
West Virginia	22,447	19,460	2,115	1,699	W	W	6,207	8,011
Total	1,835,289	1,731,664	127,695	129,548	274,057	247,574	352,221	316,833
PAD Dist. II								
Illinois	180,879	187,593	31,540	30,716	W	W	167,845	30,792
Indiana	169,097	172,440	15,992	15,669	-	W	16,868	14,505
Iowa	168,031	165,960	4,523	4,837	W	W	16,078	16,148
Kansas	53,299	64,475	9,772	10,694	21,934	W	119,650	61,324
Kentucky	100,136	106,330	5,609	5,171	W	W	105,775	114,475
Michigan	362,213	358,153	24,789	25,795	W	W	72,069	65,070
Minnesota	175,925	157,106	5,323	5,091	-	-	31,897	29,212
Missouri	273,971	271,211	8,680	12,834	-	-	43,824	47,369
Nebraska	61,522	60,631	4,684	6,358	W	-	5,969	7,220
North Dakota	53,416	48,213	1,601	1,488	-	W	585	780
Ohio	196,990	219,927	24,828	28,741	W	W	143,628	46,386
Oklahoma	54,925	67,851	7,899	10,721	W	W	80,668	87,213
South Dakota	49,729	52,443	1,823	1,344	-	-	1,274	1,482
Tennessee	103,488	95,646	11,829	13,311	W	W	16,818	17,032
Wisconsin	244,578	258,948	11,891	13,752	-	-	18,723	30,238
Total	2,248,199	2,286,927	170,782	186,522	214,911	387,966	841,671	569,246
PAD Dist. III								
Alabama	109,359	114,217	8,365	9,222	-	-	11,030	12,748
Arkansas	74,039	82,693	6,098	7,735	-	W	6,060	5,612
Louisiana	51,991	40,753	6,351	6,546	829,492	898,690	18,565	16,500
Mississippi	86,103	91,938	9,092	10,788	W	W	22,302	13,038
New Mexico	54,155	66,679	9,852	7,910	W	119,199	10,151	7,893
Texas	170,258	199,574	30,587	34,018	4,940,487	4,577,061	323,742	70,911
Total	545,905	595,854	70,345	76,219	5,992,232	5,712,140	391,850	126,702
PAD Dist. IV								
Colorado	83,621	93,855	6,696	8,158	-	W	24,784	24,249
Idaho	14,693	18,408	3,562	3,915	-	-	2,266	2,549
Montana	29,544	34,752	3,473	4,711	-	-	5,367	W
Utah	16,494	20,501	3,889	4,333	-	-	5,960	4,463
Wyoming	25,022	29,406	2,677	4,838	W	W	11,882	13,594
Total	169,374	196,922	20,297	25,955	1	105	50,259	48,726
PAD Dist. V								
Alaska	15,770	15,966	384	431	-	-	W	W
Arizona	46,365	43,090	5,589	5,573	-	-	18,909	17,249
California	236,175	343,455	64,227	74,625	W	W	148,080	96,327
Hawaii	W	W	W	W	-	-	W	W
Nevada	31,249	36,236	2,405	2,042	-	-	5,454	5,111
Oregon	21,341	24,117	14,423	15,575	-	-	15,585	16,698
Washington	43,476	44,034	20,443	24,212	-	-	21,072	20,406
Total	414,781	513,373	110,973	123,820	171,201	87,564	210,159	156,939
U.S. Total	5,213,548	5,324,740	500,092	542,064	6,652,402	6,435,349	1,846,160	1,218,446

1/ The reported data strongly suggest that this category includes not only propane consumed as a chemical feedstock, but some refinery olefins and chemical plant fuel usage.
2/ Includes sales for refinery fuel use.

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Gas Utility		Farm		Other		Total		
1992	1991	1992	1991	1992	1991	1992	1991	District & State
								PAD Dist. I
								New England
W	-	2,254	2,223	W	W	79,151	61,854	...Connecticut
710	1,050	201	249	292	255	51,816	61,931	.....Maine
1,822	4,600	524	906	254	W	78,508	80,581	.Massachusetts
W	W	3,793	61	W	1,887	73,980	69,395	.New Hampshire
-	-	675	505	W	W	19,153	19,560	..Rhode Island
W	W	1,131	747	W	W	80,314	68,632	.....Vermont
								Central Atlantic
-	-	6,319	5,617	W	-	38,831	40,699	.....Delaware
1,310	W	10,473	7,569	W	464	110,997	84,823	.Maryland/D.C.
605	586	1,637	1,196	730	1,889	249,564	231,479	....New Jersey
3,878	3,578	10,572	7,929	2,609	2,372	297,191	301,623	.....New York
W	W	27,107	22,019	6,859	6,804	385,396	318,480	..Pennsylvania
								Lower Atlantic
W	W	16,858	15,047	1,645	2,629	334,520	334,242	.....Florida
443	W	59,039	56,044	1,148	4,441	301,753	282,059	.....Georgia
W	1,334	136,960	129,690	1,438	5,837	465,845	432,797	North Carolina
-	W	23,255	23,610	829	1,228	151,064	151,470	South Carolina
W	W	36,232	35,831	5,321	5,599	233,817	195,020	.....Virginia
-	-	5,091	3,126	W	W	36,443	76,479	.West Virginia
34,127	36,854	342,121	312,369	22,833	36,282	2,988,343	2,811,124	.....Total
								PAD Dist. II
W	W	102,025	65,606	5,022	3,117	501,630	318,177	.....Illinois
W	W	88,496	64,315	4,654	4,328	295,889	398,160	.....Indiana
-	-	181,814	110,610	4,668	4,370	375,207	302,051	.....Iowa
W	W	26,677	30,219	3,793	61,987	235,197	303,417	.....Kansas
W	W	18,896	13,651	2,341	1,980	243,941	253,939	.....Kentucky
W	8,952	40,877	28,105	89,317	82,680	645,344	614,813	.....Michigan
W	W	120,961	82,175	2,062	2,777	336,316	276,440	.....Minnesota
398	707	23,827	24,115	5,023	5,567	355,723	341,803	.....Missouri
-	-	62,877	58,734	121	91	135,442	133,034	.....Nebraska
-	W	12,451	8,497	6,338	6,678	74,391	85,069	..North Dakota
W	W	67,355	42,741	5,937	5,840	539,279	466,520	.....Ohio
W	-	17,676	14,111	3,986	4,985	170,299	192,629	.....Oklahoma
W	W	26,821	19,930	1,411	137	81,072	75,352	..South Dakota
W	W	6,196	5,503	4,058	2,991	142,545	134,555	.....Tennessee
24	W	49,369	49,945	2,160	2,599	326,745	355,538	.....Wisconsin
16,248	30,452	846,318	620,257	140,891	190,127	4,479,020	4,271,497	.....Total
								PAD Dist. III
W	W	20,709	21,813	1,332	1,538	150,883	159,868	.....Alabama
-	-	38,061	38,034	2,249	4,700	126,507	138,802	.....Arkansas
-	-	9,619	12,977	102	205	916,120	975,671	.....Louisiana
-	W	17,075	17,143	1,157	3,627	260,453	253,793	...Mississippi
-	W	3,658	2,620	W	1,165	175,809	206,005	....New Mexico
3,210	-	27,486	36,773	32,300	50,463	5,528,070	4,968,800	.....Texas
3,298	966	116,608	129,360	37,604	61,698	7,157,842	6,702,939	.....Total
								PAD Dist. IV
-	-	8,184	8,658	957	1,598	124,242	136,587	.....Colorado
-	-	1,815	2,029	W	W	28,118	34,176	.....Idaho
-	-	2,493	317	-	W	40,877	44,265	.....Montana
-	-	991	1,145	W	W	27,902	31,155	.....Utah
W	-	2,454	1,546	247	1,375	42,944	50,795	.....Wyoming
661	-	15,937	13,695	7,554	11,555	264,083	296,958	.....Total
								PAD Dist. V
W	W	W	W	-	-	16,521	16,870	.....Alaska
W	-	2,376	3,241	W	W	85,593	69,738	.....Arizona
5,089	W	24,677	38,764	5,540	11,635	654,989	652,381	....California
-	W	W	W	W	W	24,765	8,967	.....Hawaii
-	-	1,399	1,014	W	W	42,395	48,575	.....Nevada
W	-	5,836	6,774	W	2,293	60,057	65,457	.....Oregon
W	-	7,987	7,968	2,382	5,794	96,050	102,414	....Washington
17,675	359	42,343	57,858	13,238	24,489	980,370	984,402	.....Total
72,009	68,631	1,343,327	1,133,539	222,120	324,151	15,869,658	15,046,920	.....U.S. Total

Table 5. Sales of Butane, by Use, in the United States, by PAD District and State, 1992 and 1991 (Thousands of Gallons)

District & State	Residential & Commercial 1992	Residential & Commercial 1991	Internal Combustion Fuel 1992	Internal Combustion Fuel 1991	Chemical 1/ 1992	Chemical 1/ 1991	Industrial 2/ 1992	Industrial 2/ 1991
PAD Dist. I								
New England								
Connecticut	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-
Central Atlantic								
Delaware	-	-	-	-	-	-	-	-
Maryland/D.C.	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	W	W	W	-
New York	-	-	-	-	-	-	-	-
Pennsylvania	-	-	-	-	-	-	-	-
Lower Atlantic								
Florida	-	-	-	-	W	-	-	-
Georgia	-	-	-	-	-	-	-	-
North Carolina	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-
West Virginia	-	-	-	-	-	-	-	-
Total	-	-	-	-	20,969	22,508	470	-
PAD Dist. II								
Illinois	-	-	-	-	W	14,467	W	W
Indiana	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	W	W	-	-
Kansas	-	-	-	-	W	W	W	W
Kentucky	-	-	-	-	-	-	W	W
Michigan	-	-	-	-	-	-	W	-
Minnesota	-	W	-	-	-	-	-	-
Missouri	-	-	-	-	-	-	-	-
Nebraska	-	-	-	-	-	-	-	-
North Dakota	-	-	-	-	-	-	-	-
Ohio	-	-	-	-	-	-	W	-
Oklahoma	-	-	-	-	W	W	W	W
South Dakota	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	W	-	-	-
Wisconsin	-	-	-	-	-	-	-	-
Total	-	321	-	-	96,128	53,157	90,616	29,372
PAD Dist. III								
Alabama	W	W	-	W	W	W	-	-
Arkansas	-	-	-	-	-	W	-	-
Louisiana	W	-	-	W	194,687	206,195	W	W
Mississippi	W	W	-	-	W	-	-	-
New Mexico	-	-	-	-	W	W	-	-
Texas	130	W	-	-	1,225,996	1,299,718	134,713	53,545
Total	460	139	-	780	1,465,031	1,556,959	140,889	54,993
PAD Dist. IV								
Colorado	-	-	-	-	-	-	W	W
Idaho	-	-	-	-	-	-	-	-
Montana	-	-	-	-	-	-	-	-
Utah	W	-	-	-	-	-	W	W
Wyoming	-	-	-	-	W	W	W	W
Total	11	-	-	-	6,536	17	9,727	11,176
PAD Dist. V								
Alaska	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	W
California	W	W	-	W	-	W	208,847	113,964
Hawaii	-	-	-	-	-	-	W	-
Nevada	-	-	-	-	-	-	-	-
Oregon	-	-	-	-	-	-	-	-
Washington	-	-	-	-	-	-	W	W
Total	1,123	65	-	264	-	79	216,538	122,213
U.S. Total	1,594	525	-	1,052	1,588,664	1,632,720	458,240	217,752

1/ The reported data strongly suggest that this category includes not only butane consumed as a chemical feedstock, but some refinery olefins and chemical plant fuel usage.
2/ Includes sales for refinery fuel use and synthetic rubber manufacture.
3/ Includes use in secondary recovery of petroleum.

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Gas Utility 1992	Gas Utility 1991	Farm 1992	Farm 1991	Other 3/ 1992	Other 3/ 1991	Total 1992	Total 1991	District & State
								PAD Dist. I
								New England
-	-	-	-	-	W	-	520	...Connecticut
-	-	-	-	-	-	-	-	.....Maine
-	-	-	-	-	-	-	-	.Massachusetts
-	-	-	-	-	-	-	-	.New Hampshire
-	-	-	-	-	-	-	-	..Rhode Island
-	-	-	-	-	-	-	-	.....Vermont
								Central Atlantic
-	-	-	-	-	W	-	5,422	.....Delaware
-	-	-	-	-	W	-	123	.Maryland/D.C.
W	-	-	-	-	W	27,381	23,297	....New Jersey
-	-	-	-	W	W	9	1,045	.....New York
-	-	-	-	-	W	-	97	..Pennsylvania
								Lower Atlantic
-	-	-	-	-	W	1,126	21	.....Florida
-	-	-	-	-	W	-	1,309	.....Georgia
-	-	-	-	-	W	-	135	North Carolina
-	-	-	-	-	-	-	-	South Carolina
-	-	-	-	-	W	-	14	.....Virginia
-	-	-	-	-	-	-	-	.West Virginia
7,068	-	-	-	9	9,475	28,516	31,983	.....Total
								PAD Dist. II
W	-	-	-	W	W	22,120	19,154	.....Illinois
-	-	-	-	W	W	9	1,155	.....Indiana
-	-	-	-	-	-	1,408	2,186	.....Iowa
-	-	-	-	W	W	70,297	151,934	.....Kansas
-	-	-	-	-	-	15,788	18,179	.....Kentucky
-	-	-	-	W	W	54,625	57,892	.....Michigan
-	-	-	-	-	W	-	529	.....Minnesota
-	-	-	-	-	W	-	789	.....Missouri
-	-	-	-	-	-	-	-	.....Nebraska
-	-	-	-	-	-	-	-	..North Dakota
-	-	-	-	W	W	55,505	518	.....Ohio
W	-	-	-	W	W	12,826	7,718	.....Oklahoma
-	-	-	-	-	-	-	-	..South Dakota
-	-	-	-	W	W	58,523	199	.....Tennessee
-	-	-	-	-	W	-	236	.....Wisconsin
1,247	-	-	-	103,110	177,639	291,101	260,489	.....Total
								PAD Dist. III
-	-	-	-	-	-	15,755	41	.....Alabama
-	-	-	-	-	-	-	182	.....Arkansas
-	-	-	-	95,650	W	296,776	239,806	.....Louisiana
-	-	-	W	-	W	83	2,531	...Mississippi
W	W	-	-	-	W	33,464	64,073	....New Mexico
-	-	-	-	4,622	20,266	1,365,461	1,373,584	.....Texas
4,887	6,771	-	39	100,272	60,528	1,711,539	1,680,217	.....Total
								PAD Dist. IV
-	-	-	-	-	W	9,482	10,587	.....Colorado
-	-	-	-	-	-	-	-	.....Idaho
W	-	-	-	W	-	1,858	-	.....Montana
W	-	-	-	W	-	1,311	246	.....Utah
-	-	-	-	-	-	6,686	797	.....Wyoming
1,709	-	-	-	1,354	439	19,337	11,630	.....Total
								PAD Dist. V
-	-	-	-	-	-	-	-	.....Alaska
W	-	-	-	-	-	2,385	1,650	.....Arizona
W	-	-	W	W	W	230,721	117,386	....California
-	-	-	-	-	-	2,573	-	.....Hawaii
-	-	-	-	-	-	-	-	.....Nevada
-	-	-	-	-	-	-	-	.....Oregon
W	-	-	-	W	-	11,018	6,599	....Washington
18,870	-	-	262	10,966	2,752	246,697	125,635	.....Total
32,981	6,771	-	301	215,711	250,833	2,297,190	2,109,954	.....U.S. Total

Table 6. Sales of Ethane by use, in the United States, by PAD District, 1992 and 1991 (Thousands of Gallons)

District	Residential & Commercial		Internal Combustion Fuel		Chemical		Industrial 1/	
	1992	1991	1992	1991	1992	1991	1992	1991
PAD Dist. I	-	-	-	-	-	-	-	-
PAD Dist. II	-	-	-	-	233,014	225,483	71,299	9,655
PAD Dist. III	-	-	-	-	8,209,179	8,249,869	158,064	2,615
PAD Dist. IV	-	-	-	-	-	371	111	-
PAD Dist. V	-	-	-	-	-	-	-	-
U.S. Total.....	-	-	-	-	8,442,193	8,475,723	229,474	12,270

Table 7. Sales of Pentanes Plus by Use, in the United States, by PAD District, 1992 and 1991 (Thousands of Gallons)

District	Residential & Commercial		Internal Combustion Fuel		Chemical		Industrial 1/	
	1992	1991	1992	1991	1992	1991	1992	1991
PAD Dist. I	-	-	-	-	5,664	4,875	-	-
PAD Dist. II	-	-	-	-	15,432	19,791	-	-
PAD Dist. III	-	-	-	-	537,513	381,848	-	-
PAD Dist. IV	-	-	-	-	197	81	-	-
PAD Dist. V	-	-	-	-	412	405	-	-
U.S. Total.....	-	-	-	-	559,218	407,000	-	-

1/ The reported data strongly suggest that this category includes not only ethane, propane, butane and pentanes plus consumed as chemical feedstocks, but some refinery olefins and chemical plant fuel usage.
2/ Includes sales for refinery fuel use and synthetic rubber manufacture.
3/ Includes use as synthetic natural gas feedstock, and use in secondary recovery of petroleum.

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Gas Utility		Farm		Other 2/		Total		
1992	1991	1992	1991	1992	1991	1992	1991	District
-	-	-	-	-	-	-	-	PAD Dist. I
113,523	150,557	-	-	59	5,250	417,895	390,945	PAD Dist. II
-	-	-	-	31,139	73,957	8,398,382	8,326,441	PAD Dist. III
-	-	-	-	-	292	111	663	PAD Dist. IV
-	11,273	-	-	-	-	-	11,273	PAD Dist. V
113,523	161,830	-	-	31,198	79,499	8,816,388	8,729,322	.....U.S. Total

Gas Utility		Farm		Other 2/		Total		
1992	1991	1992	1991	1992	1991	1992	1991	District
-	-	-	-	2,249	1,916	24,755	22,537	PAD Dist. I
-	-	-	-	547,948	777,895	609,267	861,607	PAD Dist. II
-	-	-	-	159,421	169,539	2,295,236	1,784,722	PAD Dist. III
-	-	-	-	366	888	1,148	1,231	PAD Dist. IV
-	-	-	-	186	1,070	1,824	2,783	PAD Dist. V
-	-	-	-	710,170	951,308	2,932,230	2,672,880	.....U.S. Total

Table 8. Sales of Natural Gas Liquids and Liquefied Refinery Gases for Gasoline Blending by Product Type, PAD District and State, 1992 and 1991 (Thousands of Gallons)

District & State	Butane		Pentanes Plus		Total	
	1992	1991	1992	1991	1992	1991
PAD Dist. I						
New England						
Connecticut...	-	-	-	-	-	-
Maine.....	-	-	-	-	-	-
Massachusetts.	-	-	-	-	-	-
New Hampshire.	-	-	-	-	-	-
Rhode Island..	-	-	-	-	-	-
Vermont.....	-	-	-	-	-	-
Central Atlantic						
Delaware.....	W	-	-	-	2,340	-
Maryland/D.C..	-	-	-	-	-	-
New Jersey....	37,939	W	-	-	37,939	921
New York.....	W	W	-	-	3,959	377
Pennsylvania..	W	35,723	-	W	20,841	36,311
Lower Atlantic						
Florida.....	W	W	-	-	315	527
Georgia.....	-	-	-	-	-	-
North Carolina	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-
Virginia.....	-	-	-	-	-	-
West Virginia.	-	-	-	-	-	-
Total.....	65,394	37,548	-	588	65,394	38,136
PAD Dist. II						
Illinois.....	785,819	472,813	W	W	867,755	518,799
Indiana.....	W	161,785	-	W	77,762	202,975
Iowa.....	-	-	-	-	-	-
Kansas.....	255,377	447,439	340,983	398,294	596,360	845,733
Kentucky.....	W	W	W	W	34,932	58,335
Michigan.....	W	47,537	W	W	39,663	49,716
Minnesota.....	W	W	-	-	21,351	17,912
Missouri.....	-	-	-	-	-	-
Nebraska.....	-	-	-	-	-	-
North Dakota..	W	W	-	-	520	13,350
Ohio.....	W	43,192	-	-	36,806	43,192
Oklahoma.....	86,026	105,885	30,755	30,575	116,781	136,460
South Dakota..	-	-	-	-	-	-
Tennessee.....	-	-	-	-	-	-
Wisconsin.....	-	-	-	-	-	-
Total.....	1,329,174	1,362,396	462,756	524,076	1,791,930	1,886,472
PAD Dist. III						
Alabama.....	W	W	-	W	3,872	5,040
Arkansas.....	-	-	-	-	-	-
Louisiana.....	921,039	989,953	251,886	280,915	1,172,925	1,270,868
Mississippi...	W	W	W	W	122,484	218,975
New Mexico....	10,122	8,827	7,077	8,717	17,199	17,544
Texas.....	1,482,891	1,348,621	931,153	915,718	2,414,044	2,264,339
Total.....	2,439,738	2,368,968	1,290,786	1,407,798	3,730,524	3,776,766
PAD Dist. IV						
Colorado.....	W	W	W	W	3,716	27,730
Idaho.....	-	-	-	-	-	-
Montana.....	98,316	W	-	-	98,316	100,263
Utah.....	58,335	87,529	63,981	72,282	122,316	159,811
Wyoming.....	21,600	11,220	27,892	17,992	49,492	29,212
Total.....	178,584	220,542	95,256	96,474	273,840	317,016
PAD Dist. V						
Alaska.....	-	-	-	W	-	932
Arizona.....	W	W	-	-	232	7,303
California....	390,732	337,471	586,370	550,276	977,102	887,747
Hawaii.....	-	-	W	-	15,335	-
Nevada.....	-	-	-	-	-	-
Oregon.....	W	-	-	-	728	-
Washington....	338,184	322,354	W	-	355,307	322,354
Total.....	729,876	667,128	618,828	551,208	1,348,704	1,218,336
U.S. Total.....	4,742,766	4,656,582	2,467,626	2,580,144	7,210,392	7,236,726

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

REVISIONS

Table 2. Sales of Natural Gas Liquids and Liquefied Refinery Gases by Product Type, PAD District and State, 1990 and 1989 (Thousands of Gallons)

District & State	Ethane		Propane		Butane	
	1990	1989	1990	1989	1990	1989
PAD Dist. I						
New England						
Connecticut...	-	-	66,509	66,074	W	W
Maine.....	-	-	58,413	65,939	-	-
Massachusetts.	-	-	110,536	107,588	W	W
New Hampshire.	-	-	89,117	103,733	-	-
Rhode Island..	-	-	21,042	20,441	-	W
Vermont.....	-	-	58,854	63,167	-	-
Central Atlantic						
Delaware.....	-	-	41,966	39,892	W	W
Maryland/D.C..	-	-	82,559	89,841	W	W
New Jersey....	-	-	168,389	239,492	20,097	26,745
New York.....	-	-	235,259	233,939	W	W
Pennsylvania..	-	-	256,626	259,193	35,492	76,261
Lower Atlantic						
Florida.....	-	W	325,408	337,228	W	W
Georgia.....	-	-	252,082	309,526	W	W
North Carolina	-	-	373,344	391,251	W	W
South Carolina	-	-	122,989	154,278	-	W
Virginia.....	-	-	171,717	188,025	W	W
West Virginia.	-	W	67,802	61,569	-	-
Total.....	-	3,631	2,502,612	2,731,176	59,813	116,417
PAD Dist. II						
Illinois.....	203,996	167,739	291,955	313,336	434,010	451,957
Indiana.....	W	W	398,236	327,852	198,310	59,902
Iowa.....	W	-	265,751	301,706	W	W
Kansas.....	270,540	309,637	275,720	370,392	450,191	493,416
Kentucky.....	W	W	242,063	270,289	56,191	50,108
Michigan.....	-	W	584,958	661,358	89,228	147,480
Minnesota.....	-	W	250,357	249,004	W	W
Missouri.....	-	-	287,517	347,497	W	W
Nebraska.....	-	W	122,308	152,075	W	W
North Dakota..	W	W	59,722	73,144	18,846	15,455
Ohio.....	-	W	460,008	484,309	78,700	203,241
Oklahoma.....	328	W	144,826	160,471	81,810	134,475
South Dakota..	-	-	155,022	152,153	-	-
Tennessee.....	-	-	121,609	145,116	W	W
Wisconsin.....	-	-	279,422	290,586	W	W
Total.....	486,450	641,255	3,939,474	4,299,288	1,426,318	1,577,951
PAD Dist. III						
Alabama.....	-	W	174,938	201,596	4,729	5,963
Arkansas.....	W	W	145,666	152,852	5,583	910
Louisiana.....	853,545	829,041	937,169	806,226	993,323	1,289,438
Mississippi...	-	W	289,329	206,000	13,497	35,768
New Mexico....	131,473	W	205,150	82,635	50,365	35,013
Texas.....	6,335,500	5,494,680	4,597,056	5,479,851	2,929,010	3,646,185
Total.....	7,321,044	6,485,914	6,349,308	6,929,160	3,996,507	5,013,277
PAD Dist. IV						
Colorado.....	2,917	W	116,724	116,004	12,898	18,906
Idaho.....	-	-	25,609	35,218	-	-
Montana.....	-	-	73,090	67,073	120,199	87,177
Utah.....	-	W	38,517	49,354	71,321	102,908
Wyoming.....	W	W	49,762	63,773	34,620	44,357
Total.....	3,242	67,182	303,702	331,422	239,038	253,348
PAD Dist. V						
Alaska.....	-	-	16,113	11,665	-	-
Arizona.....	-	-	63,329	67,513	11,414	18,708
California....	W	W	668,674	725,099	525,995	620,499
Hawaii.....	-	-	W	W	-	-
Nevada.....	-	-	60,092	74,012	-	W
Oregon.....	-	-	58,139	67,717	-	-
Washington....	-	-	90,659	98,739	197,155	261,072
Total.....	12,814	440	964,488	1,052,562	734,564	902,541
U.S. Total.....	7,823,550	7,198,422	14,059,584	15,343,608	6,456,240	7,863,534

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Pentanes Plus 1990	Pentanes Plus 1989	Total 1990	Total 1989	District & State
				PAD Dist. I
				New England
W	-	66,873	66,605	...Connecticut
W	-	58,917	65,939	.....Maine
-	W	110,541	107,869	.Massachusetts
-	-	89,117	103,733	.New Hampshire
-	-	21,042	21,071	..Rhode Island
-	-	58,854	63,167	.....Vermont
				Central Atlantic
-	-	43,811	48,871	.....Delaware
W	-	82,769	89,917	.Maryland/D.C.
W	W	193,080	270,376	....New Jersey
W	W	235,910	234,397	.....New York
W	W	298,715	341,443	..Pennsylvania
				Lower Atlantic
W	W	326,835	340,917	.....Florida
W	W	255,723	312,543	.....Georgia
W	W	375,086	392,066	North Carolina
W	W	123,254	154,831	South Carolina
W	W	172,420	188,338	.....Virginia
W	W	68,476	65,024	.West Virginia
18,998	15,883	2,581,423	2,867,107	.....Total
				PAD Dist. II
41,359	50,864	971,320	983,896	.....Illinois
63,768	54,566	663,982	455,676	.....Indiana
W	W	273,150	305,062	.....Iowa
1,024,462	721,985	2,020,913	1,895,430	.....Kansas
W	10,140	315,147	334,661	.....Kentucky
84,909	52,538	759,095	919,909	.....Michigan
W	W	267,048	271,337	.....Minnesota
W	W	290,023	349,880	.....Missouri
W	W	122,736	152,518	.....Nebraska
W	W	80,354	93,797	..North Dakota
W	W	544,032	690,462	.....Ohio
50,390	36,918	277,354	415,036	.....Oklahoma
-	-	155,022	152,153	..South Dakota
W	W	123,525	146,891	.....Tennessee
W	W	280,083	291,134	.....Wisconsin
1,291,542	939,348	7,143,784	7,457,842	.....Total
				PAD Dist. III
W	W	181,817	208,798	.....Alabama
W	W	153,309	161,856	.....Arkansas
403,354	736,366	3,187,391	3,661,071	.....Louisiana
W	188,257	468,638	430,035	...Mississippi
89,180	25,768	456,168	298,673	....New Mexico
2,477,898	2,283,672	16,339,464	16,904,388	.....Texas
3,119,928	3,236,470	20,786,787	21,664,821	.....Total
				PAD Dist. IV
19,436	W	151,975	167,950	.....Colorado
-	-	25,609	35,218	.....Idaho
W	W	193,667	154,772	.....Montana
30,780	49,494	140,618	201,930	.....Utah
24,607	31,186	109,314	173,843	.....Wyoming
75,201	81,761	621,183	733,713	.....Total
				PAD Dist. V
W	W	16,439	12,031	.....Alaska
W	W	74,827	86,280	.....Arizona
449,265	408,265	1,656,748	1,754,303	....California
-	-	7,482	7,817	.....Hawaii
W	W	60,245	76,360	.....Nevada
-	-	58,139	67,717	.....Oregon
W	W	287,939	359,859	....Washington
449,953	408,824	2,161,819	2,364,367	.....Total
4,955,622	4,682,286	33,294,996	35,087,850	.....U.S. Total

Table 2. Sales of Natural Gas Liquids and Liquefied Refinery Gases by Product Type, PAD District and State, 1991 and 1990 (Thousands of Gallons)

District & State	Ethane		Propane		Butane	
	1991	1990	1991	1990	1991	1990
PAD Dist. I						
New England						
Connecticut...	-	-	61,854	66,509	W	W
Maine.....	-	-	61,931	58,413	-	-
Massachusetts.	-	-	80,581	110,536	-	W
New Hampshire.	-	-	69,395	89,117	-	-
Rhode Island..	-	-	19,560	21,042	-	-
Vermont.....	-	-	68,632	58,854	-	-
Central Atlantic						
Delaware.....	-	-	40,699	41,966	W	W
Maryland/D.C..	-	-	84,823	82,559	W	W
New Jersey....	-	-	231,479	168,389	24,218	20,097
New York.....	-	-	301,623	235,259	W	W
Pennsylvania..	-	-	318,480	256,626	35,820	35,492
Lower Atlantic						
Florida.....	-	-	334,242	325,408	W	W
Georgia.....	-	-	282,059	252,082	W	W
North Carolina	-	-	432,797	373,344	W	W
South Carolina	-	-	151,470	122,989	-	-
Virginia.....	-	-	195,020	171,717	W	W
West Virginia.	-	-	76,479	67,802	-	-
Total.....	-	-	2,811,124	2,502,612	69,531	59,813
PAD Dist. II						
Illinois.....	273,308	203,996	318,177	291,955	491,967	434,010
Indiana.....	-	W	398,160	398,236	162,940	198,310
Iowa.....	W	W	302,051	265,751	W	W
Kansas.....	102,957	270,540	303,417	275,720	599,373	450,191
Kentucky.....	W	W	253,939	242,063	W	56,191
Michigan.....	-	-	614,813	584,958	105,429	89,228
Minnesota.....	-	-	276,440	250,357	18,441	W
Missouri.....	-	-	361,803	287,517	W	W
Nebraska.....	-	-	133,034	122,308	-	W
North Dakota..	-	W	85,069	59,722	W	18,846
Ohio.....	-	-	466,520	460,008	43,710	78,700
Oklahoma.....	4,542	328	192,629	144,826	113,603	81,810
South Dakota..	-	-	75,352	155,022	-	-
Tennessee.....	-	-	134,555	121,609	W	W
Wisconsin.....	-	-	355,538	279,422	W	W
Total.....	390,945	486,450	4,271,497	3,939,474	1,622,885	1,426,318
PAD Dist. III						
Alabama.....	-	-	159,868	174,938	4,941	4,729
Arkansas.....	-	W	138,802	145,666	W	5,583
Louisiana.....	966,706	853,545	975,671	937,169	1,229,759	993,323
Mississippi...	-	-	253,793	289,329	19,198	13,497
New Mexico....	222,775	131,473	206,005	205,150	72,900	50,365
Texas.....	7,136,960	6,335,500	4,968,800	4,597,056	2,722,205	2,929,010
Total.....	8,326,441	7,321,044	6,702,939	6,349,308	4,049,185	3,996,507
PAD Dist. IV						
Colorado.....	W	2,917	136,587	116,724	32,117	12,898
Idaho.....	-	-	34,176	25,609	-	-
Montana.....	-	-	44,245	73,090	W	120,199
Utah.....	-	-	31,155	38,517	87,775	71,321
Wyoming.....	-	W	50,795	49,762	12,017	34,620
Total.....	663	3,242	296,958	303,702	232,172	239,038
PAD Dist. V						
Alaska.....	-	-	16,870	16,113	-	-
Arizona.....	-	-	69,738	63,329	8,953	11,414
California....	W	W	652,381	668,674	454,857	525,995
Hawaii.....	-	-	W	W	-	-
Nevada.....	-	-	48,575	60,092	-	-
Oregon.....	-	-	65,457	58,139	-	-
Washington....	-	-	102,414	90,659	328,953	197,155
Total.....	11,273	12,814	964,402	964,488	792,763	734,564
U.S. Total.....	8,729,322	7,823,550	15,046,920	14,059,584	6,766,536	6,456,240

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Pentanes Plus 1991	Pentanes Plus 1990	Total 1991	Total 1990	District & State
				PAD Dist. I
				New England
W	W	62,387	66,873	...Connecticut
-	W	61,931	58,917	.....Maine
W	-	80,649	110,541	.Massachusetts
-	-	69,395	89,117	.New Hampshire
-	-	19,560	21,042	..Rhode Island
-	-	68,632	58,854	.....Vermont
				Central Atlantic
-	-	46,121	43,811	.....Delaware
W	W	85,031	82,769	.Maryland/D.C.
W	W	260,874	193,080	....New Jersey
W	W	303,176	235,910	.....New York
W	W	361,676	298,715	..Pennsylvania
				Lower Atlantic
W	W	336,706	326,835	.....Florida
W	W	286,853	255,723	.....Georgia
W	W	434,929	375,086	North Carolina
W	W	152,511	123,254	South Carolina
W	W	195,914	172,420	.....Virginia
W	W	77,435	68,476	.West Virginia
23,125	18,998	2,903,780	2,581,423	.....Total
				PAD Dist. II
70,938	41,359	1,154,390	971,320	.....Illinois
W	63,768	606,651	663,982	.....Indiana
W	W	313,084	273,150	.....Iowa
1,078,313	1,024,462	2,084,060	2,020,913	.....Kansas
W	W	347,670	315,147	.....Kentucky
107,288	84,909	827,530	759,095	.....Michigan
W	W	296,027	267,048	.....Minnesota
W	W	364,369	290,023	.....Missouri
W	W	133,626	122,736	.....Nebraska
W	W	99,273	80,354	..North Dakota
W	W	518,406	544,032	.....Ohio
47,012	50,390	357,786	277,354	.....Oklahoma
-	-	75,352	155,022	..South Dakota
W	W	136,729	123,525	.....Tennessee
W	W	356,057	280,083	.....Wisconsin
1,385,683	1,291,542	7,671,010	7,143,784	.....Total
				PAD Dist. III
W	W	167,144	181,817	.....Alabama
W	W	141,687	153,309	.....Arkansas
343,526	403,354	3,515,662	3,187,391	.....Louisiana
W	W	476,923	468,638	...Mississippi
112,189	69,180	613,869	456,168	....New Mexico
2,527,835	2,477,898	17,355,800	16,339,464	.....Texas
3,192,520	3,119,928	22,271,085	20,786,787	.....Total
				PAD Dist. IV
7,376	19,436	176,743	151,975	.....Colorado
-	-	34,176	25,609	.....Idaho
-	W	144,508	193,667	.....Montana
72,282	30,780	191,212	140,618	.....Utah
18,047	24,607	80,859	109,314	.....Wyoming
97,705	75,201	627,498	621,183	.....Total
				PAD Dist. V
W	W	17,802	16,439	.....Alaska
W	W	78,864	74,827	.....Arizona
552,277	449,265	1,670,788	1,656,748	....California
-	-	8,967	7,482	.....Hawaii
W	W	48,926	60,245	.....Nevada
-	-	65,457	58,139	.....Oregon
W	W	431,625	287,939	....Washington
553,991	449,953	2,322,429	2,161,819	.....Total
5,253,024	4,955,622	35,795,802	33,294,996	.....U.S. Total

Table 3. Sales of Natural Gas Liquids and Liquefied Refinery Gases, by End Use, PAD District and State, 1990 and 1989 (Thousands of Gallons)

District & State	Residential & Commercial 1990	Residential & Commercial 1989	Internal Combustion Fuel 1990	Internal Combustion Fuel 1989	Chemical 1/ 1990	Chemical 1/ 1989	Industrial 2/ 1990	Industrial 2/ 1989
PAD Dist. I								
New England								
Connecticut...	42,335	41,526	3,216	3,104	12,851	W	5,497	14,612
Maine.....	42,649	45,497	1,528	2,987	W	W	11,708	14,601
Massachusetts.	67,115	78,394	5,277	6,069	-	-	8,820	11,297
New Hampshire.	71,612	79,730	1,318	1,360	-	-	9,529	9,884
Rhode Island..	13,679	13,455	1,708	1,835	-	-	5,219	4,450
Vermont.....	54,819	57,334	952	1,076	-	-	2,108	3,400
Central Atlantic								
Delaware.....	28,313	27,003	511	679	W	W	5,173	2,988
Maryland/D.C..	53,830	54,458	4,648	5,676	W	-	12,926	17,117
New Jersey....	44,427	64,403	6,652	8,126	110,300	172,135	20,713	17,085
New York.....	201,571	194,258	13,398	15,077	661	809	12,292	16,386
Pennsylvania..	125,136	124,795	13,986	16,762	W	W	50,573	115,612
Lower Atlantic								
Florida.....	246,523	239,315	18,969	20,916	-	W	21,928	31,732
Georgia.....	167,985	202,263	9,364	11,514	W	W	25,189	38,252
North Carolina	211,346	238,315	14,259	15,047	W	1,164	44,756	37,072
South Carolina	83,104	103,203	7,727	8,735	W	W	15,456	20,551
Virginia.....	104,950	102,924	5,654	9,074	W	1,211	29,042	28,292
West Virginia.	20,571	19,586	1,682	1,926	W	37,450	4,423	3,082
Total.....	1,579,965	1,686,459	110,849	129,963	228,704	223,155	285,352	386,413
PAD Dist. II								
Illinois.....	158,560	173,215	29,221	26,189	104,636	78,656	47,120	51,912
Indiana.....	172,653	201,762	13,608	14,877	109,901	W	12,245	26,708
Iowa.....	135,511	166,630	3,762	5,024	W	W	14,440	15,547
Kansas.....	58,419	71,771	12,656	18,137	326,656	350,010	54,200	51,290
Kentucky.....	90,201	109,846	5,779	7,136	W	W	140,355	150,699
Michigan.....	323,039	353,345	25,247	27,903	46,581	W	62,506	109,390
Minnesota.....	144,908	154,359	5,054	6,048	W	W	29,055	38,410
Missouri.....	207,201	246,518	10,449	11,406	2,189	1,150	34,365	36,437
Nebraska.....	48,323	59,791	5,448	6,437	W	W	11,193	12,815
North Dakota..	32,250	41,411	1,242	1,732	W	W	3,576	5,571
Ohio.....	207,790	223,309	31,883	36,720	W	W	44,351	245,388
Oklahoma.....	62,940	74,543	8,626	8,366	1,475	84,188	57,608	61,341
South Dakota..	85,531	70,154	2,030	1,970	-	-	1,120	6,920
Tennessee.....	84,815	97,812	11,229	15,261	W	W	21,602	22,704
Wisconsin.....	206,910	219,643	10,531	11,952	W	W	24,398	20,008
Total.....	2,019,051	2,264,109	176,765	199,158	735,032	581,939	558,134	859,140
PAD Dist. III								
Alabama.....	132,823	150,039	8,591	8,713	W	W	10,814	14,957
Arkansas.....	91,445	100,911	7,406	6,957	W	W	5,297	4,938
Louisiana.....	38,268	44,647	6,550	7,016	1,852,609	1,895,960	44,256	288,644
Mississippi...	106,627	112,227	11,720	10,976	137,305	28,002	20,057	38,995
New Mexico....	84,260	60,422	10,486	10,824	282,874	W	7,026	5,012
Texas.....	303,034	322,868	42,729	44,392	13,042,293	12,793,313	117,961	87,521
Total.....	756,457	791,114	87,480	88,878	15,318,337	14,878,385	205,411	440,067
PAD Dist. IV								
Colorado.....	83,835	78,882	6,658	5,812	W	W	25,595	30,283
Idaho.....	15,737	19,735	4,271	4,025	-	-	2,177	5,674
Montana.....	40,175	41,037	5,942	5,242	-	-	19,223	13,785
Utah.....	20,970	23,067	4,518	5,502	W	W	3,512	8,781
Wyoming.....	24,060	29,209	2,394	3,476	W	W	16,468	55,878
Total.....	184,777	191,930	23,783	24,057	27,793	60,173	66,975	114,401
PAD Dist. V								
Alaska.....	14,820	9,780	502	714	-	-	W	759
Arizona.....	38,143	40,671	4,906	6,231	W	W	14,655	12,258
California....	284,115	309,766	82,303	87,052	92,985	11,608	309,323	543,742
Hawaii.....	W	W	W	W	-	-	-	-
Nevada.....	40,379	42,107	2,005	1,945	W	W	4,383	10,630
Oregon.....	18,767	17,724	16,295	18,226	-	-	15,454	19,018
Washington....	32,461	30,023	25,960	24,413	W	W	29,933	78,070
Total.....	434,983	456,952	133,114	139,482	104,180	23,573	374,107	664,477
U.S. Total.....	4,975,233	5,390,564	531,991	581,538	16,414,046	15,767,225	1,489,979	2,460,498

1/ The reported data strongly suggest that this category includes not only ethane, propane, butane and pentanes plus consumed as chemical feedstocks, but some refinery olefins and chemical plant fuel usage.
2/ Includes sales for refinery fuel use and synthetic rubber manufacture.
3/ Includes use as synthetic natural gas feedstock, and use in secondary recovery of petroleum.

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Gas Utility		Farm		Other 3/		Total		
1990	1989	1990	1989	1990	1989	1990	1989	District & State
								PAD Dist. I
								New England
-	W	2,448	2,617	W	W	66,873	66,605	...Connecticut
1,199	W	243	217	100	W	58,413	65,939	.....Maine
27,325	10,065	833	715	1,171	1,329	110,541	107,869	.Massachusetts
1,351	W	241	54	5,066	11,204	89,117	103,733	.New Hampshire
W	W	43	W	W	W	21,042	21,071	..Rhode Island
-	W	339	225	W	W	58,854	63,167	.....Vermont
								Central Atlantic
W	-	6,142	7,182	3,422	W	43,806	39,892	.....Delaware
-	-	8,942	9,949	2,314	2,717	82,769	89,917	.Maryland/D.C.
W	906	583	848	1,732	5,529	184,655	269,032	....New Jersey
W	W	5,167	5,340	2,158	2,341	235,696	234,397	.....New York
W	W	18,584	24,018	2,320	8,114	270,735	296,452	..Pennsylvania
								Lower Atlantic
18,399	20,070	13,843	16,995	7,173	8,239	326,835	337,809	.....Florida
W	297	47,597	54,403	2,904	4,435	259,723	312,543	.....Georgia
1,269	W	93,456	94,214	8,574	5,596	375,086	392,066	North Carolina
W	222	15,445	20,185	534	1,589	123,254	154,831	South Carolina
W	W	28,128	32,040	3,337	14,772	172,420	188,338	.....Virginia
-	-	2,798	2,961	W	W	68,476	65,024	.West Virginia
52,534	39,612	244,832	272,006	42,059	71,077	2,544,295	2,808,685	.....Total
								PAD Dist. II
W	121,783	71,783	71,908	6,212	7,850	542,357	531,513	.....Illinois
W	W	78,271	69,071	5,863	8,247	404,912	342,681	.....Indiana
W	W	106,505	108,997	3,763	3,774	273,150	305,062	.....Iowa
W	92,285	32,016	42,585	651,247	471,394	1,160,283	1,097,472	.....Kansas
W	W	12,538	16,727	W	2,259	264,134	290,597	.....Kentucky
6,418	W	36,803	31,183	203,524	274,827	704,118	847,234	.....Michigan
W	W	71,041	50,615	492	2,038	251,418	256,213	.....Minnesota
W	W	24,629	27,905	2,097	5,619	290,013	349,632	.....Missouri
-	W	57,091	72,523	48	250	122,736	152,394	.....Nebraska
W	W	16,997	23,579	5,473	802	60,510	73,751	..North Dakota
W	W	58,823	43,008	7,076	7,025	467,844	558,612	.....Ohio
W	W	16,109	13,327	3,593	4,191	150,361	245,961	.....Oklahoma
W	-	65,521	71,810	814	1,299	155,022	152,153	..South Dakota
W	W	3,354	5,312	826	4,832	123,525	146,891	.....Tennessee
W	-	33,981	30,699	4,020	8,716	280,083	291,134	.....Wisconsin
180,082	258,582	685,462	679,249	895,940	803,123	5,250,466	5,641,300	.....Total
								PAD Dist. III
-	W	21,911	25,906	823	1,373	176,684	202,049	.....Alabama
W	W	39,083	36,588	2,584	4,082	147,873	161,240	.....Arkansas
-	-	9,762	8,353	100,290	85,593	2,051,735	2,330,213	.....Louisiana
W	-	14,377	16,576	9,138	991	299,379	207,767	...Mississippi
W	W	4,355	5,285	4,146	12,971	427,184	247,863	....New Mexico
W	W	41,952	49,120	221,301	948,242	13,769,322	14,245,591	.....Texas
34,770	1,199	131,440	141,828	338,282	1,053,252	16,872,177	17,394,723	.....Total
								PAD Dist. IV
-	-	5,511	7,478	1,230	1,926	128,883	157,974	.....Colorado
-	-	2,347	2,825	1,077	2,959	25,609	35,218	.....Idaho
-	-	3,789	2,853	3,961	4,671	73,090	67,588	.....Montana
-	-	1,068	1,565	W	W	45,095	58,192	.....Utah
-	-	1,830	2,380	W	2,631	53,162	103,437	.....Wyoming
-	-	14,545	17,101	7,966	14,747	325,839	422,409	.....Total
								PAD Dist. V
-	-	W	W	W	W	16,113	11,665	.....Alaska
-	W	4,784	4,128	841	2,432	63,413	67,576	.....Arizona
13,491	1,213	40,775	44,022	18,273	42,294	841,265	1,039,697	....California
-	-	W	W	W	W	7,482	7,817	.....Hawaii
-	-	1,511	1,819	W	5,749	60,245	76,108	.....Nevada
-	W	6,748	7,379	875	5,338	58,139	67,717	.....Oregon
-	-	5,766	5,389	2,165	4,906	96,410	142,849	....Washington
13,491	3,042	59,659	62,779	23,533	61,124	1,143,067	1,611,429	.....Total
280,877	302,435	1,135,938	1,172,963	1,307,780	2,003,323	26,135,844	27,678,546	.....U.S. Total

Table 3. Sales of Natural Gas Liquids and Liquefied Refinery Gases, by End Use, PAD District and State, 1991 and 1990 (Thousands of Gallons)

District & State	Residential & Commercial 1991	Residential & Commercial 1990	Internal Combustion Fuel 1991	Internal Combustion Fuel 1990	Chemical 1/ 1991	Chemical 1/ 1990	Industrial 2/ 1991	Industrial 2/ 1990
PAD Dist. I								
New England								
Connecticut	46,955	42,335	3,941	3,216	W	12,851	6,939	5,497
Maine	46,389	42,649	1,668	1,528	W	W	11,336	11,708
Massachusetts	60,726	67,115	6,785	5,277	W	-	7,233	8,820
New Hampshire	60,713	71,612	907	1,318	-	-	5,488	9,529
Rhode Island	13,814	13,679	1,437	1,708	-	-	3,772	5,219
Vermont	58,691	54,819	1,072	952	-	-	6,493	2,108
Central Atlantic								
Delaware	31,168	28,313	619	511	W	W	3,162	5,173
Maryland/D.C.	60,092	53,830	4,213	4,648	W	W	11,569	12,926
New Jersey	54,732	44,427	6,850	6,652	172,710	110,300	21,201	20,713
New York	249,558	201,571	15,561	13,398	556	661	22,200	12,292
Pennsylvania	145,289	125,136	18,491	13,986	W	W	66,970	50,573
Lower Atlantic								
Florida	255,049	246,523	17,622	18,969	-	-	24,624	21,928
Georgia	180,396	167,985	11,046	9,364	W	W	30,122	25,189
North Carolina	236,667	211,346	18,291	14,259	W	W	40,778	44,756
South Carolina	97,322	83,104	9,396	7,727	W	W	18,576	15,456
Virginia	114,643	104,950	9,950	5,654	W	W	28,359	29,042
West Virginia	19,460	20,571	1,699	1,682	44,650	W	8,011	4,423
Total	1,731,664	1,579,965	129,548	110,849	290,703	228,704	316,833	285,352
PAD Dist. II								
Illinois	187,593	158,560	30,716	29,221	184,016	104,636	34,209	47,120
Indiana	172,440	172,653	15,669	13,608	W	109,901	14,505	12,245
Iowa	165,960	135,511	4,837	3,762	W	W	16,148	14,440
Kansas	64,475	58,419	10,694	12,656	186,594	326,656	65,183	54,200
Kentucky	106,330	90,201	5,171	5,779	W	W	142,299	140,355
Michigan	358,153	323,039	25,795	25,247	48,960	46,581	65,070	62,506
Minnesota	157,427	144,908	5,091	5,054	W	W	29,212	29,055
Missouri	271,211	207,201	12,834	10,449	W	2,189	47,369	34,365
Nebraska	60,631	48,323	6,358	5,448	W	W	7,220	11,193
North Dakota	48,213	32,250	1,488	1,242	W	W	780	3,576
Ohio	219,927	207,790	28,741	31,883	W	W	46,386	44,351
Oklahoma	67,851	62,940	10,721	8,626	26,272	1,475	91,140	57,608
South Dakota	52,443	85,531	1,344	2,030	-	-	1,482	1,120
Tennessee	95,646	84,815	13,311	11,229	W	W	17,032	21,602
Wisconsin	258,948	206,910	13,752	10,531	W	W	30,238	24,398
Total	2,287,248	2,019,051	186,522	176,765	750,318	735,032	608,273	558,134
PAD Dist. III								
Alabama	114,221	132,823	9,249	8,591	W	W	12,748	10,814
Arkansas	82,693	91,445	7,735	7,404	W	W	5,612	5,297
Louisiana	40,753	38,268	7,307	6,550	2,122,248	1,852,609	17,948	44,256
Mississippi	92,018	106,627	10,788	11,720	W	137,305	13,038	20,057
New Mexico	66,679	84,260	7,910	10,456	439,611	282,874	7,893	7,026
Texas	199,629	303,034	34,018	42,729	14,448,388	13,042,293	127,071	117,961
Total	595,993	756,457	77,007	87,480	17,134,151	15,318,337	184,310	205,411
PAD Dist. IV								
Colorado	93,855	83,835	8,158	6,658	728	W	34,397	25,595
Idaho	18,408	15,737	3,915	4,271	-	-	2,549	2,177
Montana	34,752	40,175	4,711	5,942	-	-	W	19,223
Utah	20,501	20,970	4,333	4,518	-	W	4,709	3,512
Wyoming	29,406	24,060	4,838	2,394	W	W	14,374	16,468
Total	196,922	184,777	25,955	23,783	836	27,793	59,900	66,975
PAD Dist. V								
Alaska	15,966	14,820	431	502	-	-	W	W
Arizona	43,090	38,143	5,573	4,906	W	W	18,899	14,655
California	343,520	284,115	74,889	82,303	88,574	92,985	210,291	309,323
Hawaii	W	W	W	W	-	-	W	-
Nevada	36,236	40,379	2,042	2,005	W	W	5,111	4,383
Oregon	24,117	18,767	15,575	16,295	-	-	16,698	15,454
Washington	44,034	32,461	24,212	25,960	W	W	27,005	29,933
Total	513,438	434,983	124,084	133,114	89,356	104,180	279,152	374,107
U.S. Total	5,325,265	4,975,233	543,116	531,991	18,265,364	16,414,046	1,448,468	1,489,979

1/ The reported data strongly suggest that this category includes not only ethane, propane, butane and pentanes plus consumed as chemical feedstocks, but some refinery olefins and chemical plant fuel usage.
2/ Includes sales for refinery fuel use and synthetic rubber manufacture.
3/ Includes use as synthetic natural gas feedstock, and use in secondary recovery of petroleum.

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Gas Utility		Farm		Other 3/		Total		
1991	1990	1991	1990	1991	1990	1991	1990	District & State
								PAD Dist. I
								New England
-	-	2,223	2,448	W	W	62,387	66,873	...Connecticut
1,050	1,199	249	243	255	100	61,931	58,413	.....Maine
4,600	27,325	906	833	W	1,171	80,649	110,541	.Massachusetts
W	1,351	61	241	1,887	5,066	69,395	89,117	.New Hampshire
-	W	505	43	W	W	19,560	21,042	..Rhode Island
W	-	747	339	W	W	68,632	58,854	.....Vermont
								Central Atlantic
-	W	5,617	6,142	W	3,422	46,121	43,806	.....Delaware
W	-	7,569	8,942	587	2,314	85,031	82,769	.Maryland/D.C.
586	W	1,196	583	2,678	1,732	259,953	184,655	....New Jersey
3,578	W	7,929	5,167	3,417	2,158	302,799	235,696	.....New York
W	W	22,019	18,584	6,901	2,320	325,365	270,735	..Pennsylvania
								Lower Atlantic
W	18,399	15,047	13,843	4,566	7,173	336,179	326,835	.....Florida
W	W	56,044	47,597	5,750	2,904	286,853	255,723	.....Georgia
1,334	1,269	129,690	93,456	5,972	8,574	434,929	375,086	North Carolina
W	W	23,610	15,445	1,228	534	152,511	123,254	South Carolina
W	W	35,831	28,128	5,613	3,337	195,914	172,420	.....Virginia
-	-	3,126	2,798	W	W	77,435	68,476	.West Virginia
36,854	52,534	312,369	244,832	47,673	42,059	2,865,644	2,544,295	.....Total
								PAD Dist. II
129,064	W	65,606	71,783	4,387	6,212	635,591	542,357	.....Illinois
W	W	64,315	78,271	5,538	5,863	403,676	404,912	.....Indiana
-	W	110,610	106,505	4,370	3,763	313,084	273,150	.....Iowa
W	W	30,219	32,016	853,996	651,247	1,238,327	1,160,283	.....Kansas
W	W	13,651	12,538	1,980	W	289,335	284,134	.....Kentucky
8,952	6,418	28,105	36,803	242,779	203,524	777,814	704,118	.....Michigan
W	W	82,175	71,041	2,985	492	278,115	251,618	.....Minnesota
707	W	24,115	24,629	6,356	2,097	364,369	290,013	.....Missouri
-	-	58,734	57,091	91	48	133,626	122,736	.....Nebraska
W	W	8,497	16,997	6,678	5,473	85,923	60,510	..North Dakota
W	W	42,741	58,823	6,358	7,076	475,214	467,844	.....Ohio
-	W	16,111	16,109	9,231	3,593	221,326	150,361	.....Oklahoma
W	W	19,930	65,521	137	814	75,352	155,022	..South Dakota
W	W	5,503	3,354	3,190	826	136,729	123,525	.....Tennessee
W	W	49,945	33,981	2,835	4,020	356,057	280,083	.....Wisconsin
181,009	180,082	620,257	685,462	1,150,911	895,940	5,784,538	5,250,466	.....Total
								PAD Dist. III
W	-	21,813	21,911	1,538	823	162,184	176,684	.....Alabama
-	W	38,034	39,083	4,700	2,584	141,687	147,873	.....Arkansas
-	-	12,977	9,762	43,561	100,290	2,244,794	2,051,735	.....Louisiana
W	W	17,182	14,377	6,039	9,138	257,948	299,379	...Mississippi
W	W	2,620	4,355	64,302	4,146	596,325	427,184	....New Mexico
-	W	36,773	41,952	265,582	221,301	15,091,461	13,769,322	.....Texas
7,737	34,770	129,399	131,440	365,722	338,282	18,494,319	16,872,177	.....Total
								PAD Dist. IV
-	-	8,658	5,511	3,217	1,230	149,013	128,883	.....Colorado
-	-	2,029	2,347	W	1,077	34,176	25,609	.....Idaho
-	-	317	3,789	W	3,961	44,245	73,090	.....Montana
-	-	1,145	1,068	W	W	31,401	45,095	.....Utah
-	-	1,546	1,830	1,375	W	51,647	53,162	.....Wyoming
-	-	13,695	14,545	13,174	7,966	310,482	325,839	.....Total
								PAD Dist. V
W	-	W	W	-	W	16,870	16,113	.....Alaska
-	-	3,241	4,784	W	841	71,561	63,413	.....Arizona
11,284	13,491	39,026	40,775	15,457	18,273	783,041	841,265	....California
W	-	W	W	W	W	8,967	7,482	.....Hawaii
-	-	1,014	1,511	W	W	48,926	60,245	.....Nevada
-	-	6,774	6,748	2,293	875	65,457	58,139	.....Oregon
-	-	7,968	5,766	5,794	2,165	109,271	96,410	....Washington
11,632	13,491	58,120	59,659	28,311	23,533	1,104,093	1,143,067	.....Total
237,232	280,877	1,133,840	1,135,938	1,605,791	1,307,780	28,559,076	26,135,844	.....U.S. Total

Table 5. Sales of Butane, by Use, in the United States, by PAD District and State, 1990 and 1989 (Thousands of Gallons)

District & State	Residential & Commercial 1990	Residential & Commercial 1989	Internal Combustion Fuel 1990	Internal Combustion Fuel 1989	Chemical 1/ 1990	Chemical 1/ 1989	Industrial 2/ 1990	Industrial 2/ 1989
PAD Dist. I								
New England								
Connecticut	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-
Central Atlantic								
Delaware	-	-	-	-	-	-	-	-
Maryland/D.C.	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	W	W	-	-
New York	-	-	-	-	W	W	-	-
Pennsylvania	W	-	-	-	-	-	W	31,038
Lower Atlantic								
Florida	W	W	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-
North Carolina	-	-	-	-	-	W	-	-
South Carolina	-	-	-	-	-	W	-	-
Virginia	-	-	-	-	-	-	-	-
West Virginia	-	-	-	-	-	-	-	-
Total	15	39	-	-	10,584	24,720	7,368	31,038
PAD Dist. II								
Illinois	-	-	-	-	8,596	W	W	W
Indiana	-	-	-	-	-	W	-	-
Iowa	-	-	-	-	W	W	-	-
Kansas	-	-	-	-	W	29,473	W	W
Kentucky	-	-	-	-	-	-	W	W
Michigan	-	-	-	-	W	-	-	W
Minnesota	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	-	-	-	-
Nebraska	-	-	-	-	-	-	W	-
North Dakota	-	-	-	-	-	-	-	-
Ohio	-	-	-	-	-	-	W	W
Oklahoma	-	-	-	-	182	W	W	W
South Dakota	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-	-	-
Total	-	-	-	-	35,504	50,383	38,005	130,332
PAD Dist. III								
Alabama	W	W	W	-	-	W	-	-
Arkansas	-	-	-	-	-	W	-	-
Louisiana	-	-	W	W	88,783	48,371	W	W
Mississippi	86	101	-	-	-	-	W	W
New Mexico	-	-	-	-	W	W	-	W
Texas	W	244	W	W	1,364,775	2,143,104	W	W
Total	137	375	455	234	1,485,016	2,201,622	47,152	287,191
PAD Dist. IV								
Colorado	W	-	-	-	W	W	W	W
Idaho	-	-	-	-	-	-	-	-
Montana	-	-	-	-	-	-	-	W
Utah	-	-	-	-	W	W	W	W
Wyoming	-	-	-	-	W	W	-	W
Total	1	-	-	-	10,861	15,390	7,080	7,672
PAD Dist. V								
Alaska	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	W
California	449	1,408	211	W	-	-	156,036	308,648
Hawaii	-	-	-	-	-	-	-	-
Nevada	-	-	-	W	-	-	-	-
Oregon	-	-	-	-	-	-	-	-
Washington	-	-	-	-	-	-	W	44,062
Total	449	1,408	211	149	-	-	161,507	352,714
U.S. Total	601	1,822	666	383	1,541,965	2,292,115	261,032	808,907

1/ The reported data strongly suggest that this category includes not only butane consumed as a chemical feedstock, but some refinery olefins and chemical plant fuel usage.
2/ Includes sales for refinery fuel use and synthetic rubber manufacture.
3/ Includes use in secondary recovery of petroleum.

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Gas Utility 1990	Gas Utility 1989	Farm 1990	Farm 1989	Other 3/ 1990	Other 3/ 1989	Total 1990	Total 1989	District & State
								PAD Dist. I
								New England
-	-	-	-	W	W	339	531	...Connecticut
-	-	-	-	-	-	-	-	.....Maine
-	-	-	-	W	W	5	272	.Massachusetts
-	-	-	-	-	-	-	-	.New Hampshire
-	-	-	-	-	W	-	630	..Rhode Island
-	-	-	-	-	-	-	-	.....Vermont
								Central Atlantic
-	-	-	-	W	-	1,840	-	.....Delaware
-	-	-	-	W	W	101	76	.Maryland/D.C.
W	-	-	-	W	W	11,672	25,401	....New Jersey
-	-	-	-	W	W	216	249	.....New York
-	-	-	-	W	W	7,512	31,270	..Pennsylvania
								Lower Atlantic
-	-	-	-	-	-	14	39	.....Florida
-	-	-	-	W	W	1,062	1,638	.....Georgia
-	-	-	-	W	W	417	608	North Carolina
-	-	-	-	-	W	-	224	South Carolina
-	-	-	-	W	W	11	165	.....Virginia
-	-	-	-	-	-	-	-	.West Virginia
185	-	-	-	5,057	5,306	23,189	61,103	.....Total
								PAD Dist. II
-	-	-	-	W	W	29,820	42,481	.....Illinois
-	-	-	-	W	W	575	487	.....Indiana
-	-	-	-	W	W	1,629	1,482	.....Iowa
-	-	-	-	W	W	97,281	100,704	.....Kansas
-	-	-	-	-	-	11,296	13,654	.....Kentucky
-	-	-	-	W	W	36,007	78,599	.....Michigan
-	-	-	-	W	W	244	2,495	.....Minnesota
-	-	-	-	W	W	678	1,067	.....Missouri
-	-	-	-	-	-	4	-	.....Nebraska
-	-	-	-	-	-	-	-	..North Dakota
-	-	-	-	W	W	2,512	71,391	.....Ohio
-	-	-	-	W	-	1,857	1,639	.....Oklahoma
-	-	-	-	-	-	-	-	..South Dakota
-	-	-	-	W	W	413	1,000	.....Tennessee
-	-	-	-	W	W	424	432	.....Wisconsin
-	-	-	-	109,232	134,716	182,740	315,431	.....Total
								PAD Dist. III
-	-	-	-	-	-	24	40	.....Alabama
-	-	W	-	W	W	147	294	.....Arkansas
-	-	-	-	24,444	W	128,062	313,675	.....Louisiana
-	-	-	-	W	W	8,640	864	...Mississippi
-	-	-	-	W	-	35,240	9,971	....New Mexico
W	-	-	W	19,299	W	1,416,870	2,189,937	.....Texas
1	-	9	27	56,213	25,372	1,588,983	2,514,781	.....Total
								PAD Dist. IV
-	-	-	-	W	-	9,233	9,489	.....Colorado
-	-	-	-	-	-	-	-	.....Idaho
-	-	-	-	-	-	-	515	.....Montana
-	-	-	-	-	-	5,558	7,921	.....Utah
-	-	-	-	-	-	3,075	5,137	.....Wyoming
-	-	-	-	4	-	17,866	23,062	.....Total
								PAD Dist. V
-	-	-	-	-	-	-	-	.....Alaska
-	-	-	-	-	-	-	4	.....Arizona
-	-	W	W	W	W	158,704	313,515	....California
-	-	-	-	-	-	-	-	.....Hawaii
-	-	-	-	-	-	-	10	.....Nevada
-	-	-	-	-	-	-	-	.....Oregon
-	-	-	-	W	-	5,626	44,062	....Washington
-	-	217	125	1,946	3,195	164,330	357,591	.....Total
186	-	226	152	172,452	168,589	1,977,108	3,271,968	.....U.S. Total

Table 5. Sales of Butane, by Use, in the United States, by PAD District and State, 1991 and 1990 (Thousands of Gallons)

District & State	Residential & Commercial 1991	Residential & Commercial 1990	Internal Combustion Fuel 1991	Internal Combustion Fuel 1990	Chemical 1/ 1991	Chemical 1/ 1990	Industrial 2/ 1991	Industrial 2/ 1990
PAD Dist. I								
New England								
Connecticut...	-	-	-	-	-	-	-	-
Maine.....	-	-	-	-	-	-	-	-
Massachusetts.	-	-	-	-	-	-	-	-
New Hampshire.	-	-	-	-	-	-	-	-
Rhode Island..	-	-	-	-	-	-	-	-
Vermont.....	-	-	-	-	-	-	-	-
Central Atlantic								
Delaware.....	-	-	-	-	-	-	-	-
Maryland/D.C..	-	-	-	-	-	-	-	-
New Jersey....	-	-	-	-	W	W	-	-
New York.....	-	-	-	-	-	W	-	-
Pennsylvania..	-	W	-	-	-	-	-	W
Lower Atlantic								
Florida.....	-	W	-	-	-	-	-	-
Georgia.....	-	-	-	-	-	-	-	-
North Carolina	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-
Virginia.....	-	-	-	-	-	-	-	-
West Virginia.	-	-	-	-	-	-	-	-
Total.....	-	15	-	-	22,508	10,564	-	7,368
PAD Dist. II								
Illinois.....	-	-	-	-	14,467	8,596	W	W
Indiana.....	-	-	-	-	-	-	-	-
Iowa.....	-	-	-	-	W	W	-	-
Kansas.....	-	-	-	-	W	W	W	W
Kentucky.....	-	-	-	-	-	-	W	W
Michigan.....	-	-	-	-	-	W	-	-
Minnesota.....	W	-	-	-	-	-	-	-
Missouri.....	-	-	-	-	-	-	-	-
Nebraska.....	-	-	-	-	-	-	-	W
North Dakota..	-	-	-	-	-	-	-	-
Ohio.....	-	-	-	-	-	-	-	W
Oklahoma.....	-	-	-	-	W	182	W	W
South Dakota..	-	-	-	-	-	-	-	-
Tennessee.....	-	-	-	-	-	-	-	-
Wisconsin.....	-	-	-	-	-	-	-	-
Total.....	321	-	-	-	53,157	35,504	29,372	38,005
PAD Dist. III								
Alabama.....	W	W	W	W	W	-	-	-
Arkansas.....	-	-	-	-	W	-	-	-
Louisiana.....	-	-	W	W	206,195	88,783	W	W
Mississippi...	W	84	-	-	-	-	-	W
New Mexico....	-	-	-	-	W	W	-	-
Texas.....	W	W	-	W	1,299,718	1,364,775	53,545	W
Total.....	139	137	788	455	1,556,959	1,485,016	54,993	47,152
PAD Dist. IV								
Colorado.....	-	W	-	-	-	W	W	W
Idaho.....	-	-	-	-	-	-	-	-
Montana.....	-	-	-	-	-	-	-	-
Utah.....	-	-	-	-	-	W	W	W
Wyoming.....	-	-	-	-	W	W	W	-
Total.....	-	1	-	-	17	10,861	11,174	7,000
PAD Dist. V								
Alaska.....	-	-	-	-	-	-	-	-
Arizona.....	-	-	-	-	-	-	W	-
California....	W	449	W	211	W	-	113,964	156,036
Hawaii.....	-	-	-	-	-	-	-	-
Nevada.....	-	-	-	-	-	-	-	-
Oregon.....	-	-	-	-	-	-	-	-
Washington....	-	-	-	-	-	-	W	W
Total.....	65	449	264	211	79	-	122,213	161,507
U.S. Total.....	525	601	1,052	666	1,632,720	1,541,945	217,752	261,032

1/ The reported data strongly suggest that this category includes not only butane consumed as a chemical feedstock, but some refinery olefins and chemical plant fuel usage.
2/ Includes sales for refinery fuel use and synthetic rubber manufacture.
3/ Includes use in secondary recovery of petroleum.

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Gas Utility		Farm		Other 3/		Total		
1991	1990	1991	1990	1991	1990	1991	1990	District & State
								PAD Dist. I
								New England
-	-	-	-	W	W	520	339	...Connecticut
-	-	-	-	-	-	-	-	.....Maine
-	-	-	-	-	W	-	5	.Massachusetts
-	-	-	-	-	-	-	-	.New Hampshire
-	-	-	-	-	-	-	-	..Rhode Island
-	-	-	-	-	-	-	-	.....Vermont
								Central Atlantic
-	-	-	-	W	W	5,422	1,840	.....Delaware
-	-	-	-	W	W	123	101	.Maryland/D.C.
-	W	-	-	W	W	23,297	11,672	....New Jersey
-	-	-	-	W	W	1,045	216	.....New York
-	-	-	-	W	W	97	7,512	..Pennsylvania
								Lower Atlantic
-	-	-	-	W	-	21	14	.....Florida
-	-	-	-	W	W	1,309	1,062	.....Georgia
-	-	-	-	W	W	135	417	North Carolina
-	-	-	-	-	-	-	-	South Carolina
-	-	-	-	W	W	14	11	.....Virginia
-	-	-	-	-	-	-	-	.West Virginia
-	185	-	-	9,475	5,057	31,983	23,189	.....Total
								PAD Dist. II
-	-	-	-	W	W	19,154	29,820	.....Illinois
-	-	-	-	W	W	1,155	575	.....Indiana
-	-	-	-	-	W	2,186	1,629	.....Iowa
-	-	-	-	W	W	151,934	97,281	.....Kansas
-	-	-	-	-	-	18,179	11,296	.....Kentucky
-	-	-	-	W	W	57,892	36,007	.....Michigan
-	-	-	-	W	W	529	244	.....Minnesota
-	-	-	-	W	W	789	678	.....Missouri
-	-	-	-	-	-	-	4	.....Nebraska
-	-	-	-	-	-	-	-	..North Dakota
-	-	-	-	W	W	518	2,512	.....Ohio
-	-	-	-	W	W	7,718	1,857	.....Oklahoma
-	-	-	-	-	-	-	-	..South Dakota
-	-	-	-	W	W	199	413	.....Tennessee
-	-	-	-	W	W	236	424	.....Wisconsin
-	-	-	-	177,639	109,232	260,489	182,740	.....Total
								PAD Dist. III
-	-	-	-	-	-	41	24	.....Alabama
-	-	-	W	-	W	182	147	.....Arkansas
-	-	-	-	W	24,444	239,806	128,062	.....Louisiana
-	-	W	-	W	W	2,531	8,640	...Mississippi
W	-	-	-	W	W	64,073	35,240	....New Mexico
-	W	-	-	20,266	19,299	1,373,584	1,416,870	.....Texas
6,771	1	39	9	60,528	56,213	1,680,217	1,588,983	.....Total
								PAD Dist. IV
-	-	-	-	W	W	10,587	9,233	.....Colorado
-	-	-	-	-	-	-	-	.....Idaho
-	-	-	-	-	-	-	-	.....Montana
-	-	-	-	-	-	266	5,558	.....Utah
-	-	-	-	-	-	797	3,075	.....Wyoming
-	-	-	-	439	4	11,630	17,866	.....Total
								PAD Dist. V
-	-	-	-	-	-	-	-	.....Alaska
-	-	-	-	-	-	1,650	-	.....Arizona
-	-	W	W	W	W	117,386	158,704	....California
-	-	-	-	-	-	-	-	.....Hawaii
-	-	-	-	-	-	-	-	.....Nevada
-	-	-	-	-	-	-	-	.....Oregon
-	-	-	-	-	W	6,599	5,626	....Washington
-	-	262	217	2,752	1,946	125,635	164,330	.....Total
6,771	186	301	226	250,833	172,452	2,109,954	1,977,108	.....U.S. Total

Table 7. Sales of Pentanes Plus by Use, in the United States, by PAD District, 1990 and 1989 (Thousands of Gallons)

District	Residential & Commercial 1990	Residential & Commercial 1989	Internal Combustion Fuel 1990	Internal Combustion Fuel 1989	Chemical 1990	Chemical 1989	Industrial 1/ 1990	Industrial 1/ 1989
PAD Dist. I	-	-	-	-	16,728	12,557	-	-
PAD Dist. II	-	-	-	-	83,695	21,269	-	-
PAD Dist. III	-	-	-	-	1,560,615	1,462,151	-	-
PAD Dist. IV	-	-	-	-	1,020	743	-	-
PAD Dist. V	-	-	-	-	1,139	809	-	-
U.S. Total.....	-	-	-	-	1,663,197	1,497,529	-	-

Table 7. Sales of Pentanes Plus by Use, in the United States, by PAD District, 1991 and 1990 (Thousands of Gallons)

District	Residential & Commercial 1991	Residential & Commercial 1990	Internal Combustion Fuel 1991	Internal Combustion Fuel 1990	Chemical 1991	Chemical 1990	Industrial 1/ 1991	Industrial 1/ 1990
PAD Dist. I	-	-	-	-	20,621	16,728	-	-
PAD Dist. II	-	-	-	-	83,712	83,695	-	-
PAD Dist. III	-	-	-	-	1,615,183	1,560,615	-	-
PAD Dist. IV	-	-	-	-	343	1,020	-	-
PAD Dist. V	-	-	-	-	1,713	1,139	-	-
U.S. Total.....	-	-	-	-	1,721,572	1,663,197	-	-

1/ The reported data strongly suggest that this category includes not only ethane, propane, butane and pentanes plus consumed as chemical feedstocks, but some refinery olefins and chemical plant fuel usage.
2/ Includes sales for refinery fuel use and synthetic rubber manufacture.
3/ Includes use as synthetic natural gas feedstock, and use in secondary recovery of petroleum.

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Gas Utility		Farm		Other 2/		Total		
1990	1989	1990	1989	1990	1989	1990	1989	District
-	-	-	-	1,766	218	18,494	12,775	PAD Dist. I
-	-	-	-	558,107	364,057	641,802	385,326	PAD Dist. II
-	-	-	-	52,227	2,717	1,612,842	1,464,868	PAD Dist. III
-	-	-	-	9	-	1,029	743	PAD Dist. IV
-	-	-	-	296	27	1,435	836	PAD Dist. V
-	-	-	-	612,405	367,019	2,275,602	1,864,548	.....U.S. Total

Gas Utility		Farm		Other 2/		Total		
1991	1990	1991	1990	1991	1990	1991	1990	District
-	-	-	-	1,916	1,766	22,537	18,494	PAD Dist. I
-	-	-	-	777,895	558,107	861,607	641,802	PAD Dist. II
-	-	-	-	169,539	52,227	1,784,722	1,612,842	PAD Dist. III
-	-	-	-	888	9	1,231	1,029	PAD Dist. IV
-	-	-	-	1,070	296	2,783	1,435	PAD Dist. V
-	-	-	-	951,308	612,405	2,672,880	2,275,602	.....U.S. Total

Table 8. Sales of Natural Gas Liquids and Liquefied Refinery Gases for Gasoline Blending by Product Type, PAD District and State, 1990 and 1989 (Thousands of Gallons)

District & State	Butane		Pentanes Plus		Total	
	1990	1989	1990	1989	1990	1989
PAD Dist. I						
New England						
Connecticut...	-	-	-	-	-	-
Maine.....	-	-	W	-	504	-
Massachusetts.	-	-	-	-	-	-
New Hampshire.	-	-	-	-	-	-
Rhode Island..	-	-	-	-	-	-
Vermont.....	-	-	-	-	-	-
Central Atlantic						
Delaware.....	W	W	-	-	5	8,979
Maryland/D.C..	-	-	-	-	-	-
New Jersey....	W	W	-	-	8,425	1,344
New York.....	W	-	-	-	214	-
Pennsylvania..	27,980	44,991	-	-	27,980	44,991
Lower Atlantic						
Florida.....	-	-	-	W	-	3,108
Georgia.....	-	-	-	-	-	-
North Carolina	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-
Virginia.....	-	-	-	-	-	-
West Virginia.	-	-	-	-	-	-
Total.....	36,624	55,314	504	3,108	37,128	58,422
PAD Dist. II						
Illinois.....	404,190	409,476	W	42,907	428,963	452,383
Indiana.....	197,735	59,415	W	W	259,070	112,995
Iowa.....	-	-	-	-	-	-
Kansas.....	352,910	392,712	507,720	405,246	860,630	797,958
Kentucky.....	W	W	W	W	51,013	44,064
Michigan.....	53,221	68,881	W	W	54,977	72,675
Minnesota.....	W	W	-	-	15,630	15,124
Missouri.....	W	W	-	-	10	248
Nebraska.....	-	W	-	W	-	124
North Dakota..	18,846	15,455	W	W	19,844	20,046
Ohio.....	76,188	131,850	-	-	76,188	131,850
Oklahoma.....	79,953	132,836	47,040	36,239	126,993	169,075
South Dakota..	-	-	-	-	-	-
Tennessee.....	-	-	-	-	-	-
Wisconsin.....	-	-	-	-	-	-
Total.....	1,243,578	1,262,520	649,740	554,022	1,893,318	1,816,542
PAD Dist. III						
Alabama.....	4,705	5,923	W	W	5,133	6,749
Arkansas.....	W	W	-	-	5,436	616
Louisiana.....	865,261	975,763	270,395	355,095	1,135,656	1,330,858
Mississippi...	W	34,904	W	W	169,259	222,268
New Mexico....	15,125	25,042	13,859	25,768	28,984	50,810
Texas.....	1,512,140	1,456,248	1,058,002	1,202,549	2,570,142	2,658,797
Total.....	2,407,524	2,498,496	1,507,086	1,771,602	3,914,610	4,270,098
PAD Dist. IV						
Colorado.....	3,665	9,417	19,427	W	23,092	9,976
Idaho.....	-	-	-	-	-	-
Montana.....	120,199	86,662	W	W	120,577	87,184
Utah.....	65,763	94,987	29,760	48,751	95,523	143,738
Wyoming.....	31,545	39,220	24,607	31,186	56,152	70,406
Total.....	221,172	230,286	74,172	81,018	295,344	311,304
PAD Dist. V						
Alaska.....	-	-	W	W	326	366
Arizona.....	11,414	18,704	-	-	11,414	18,704
California....	367,291	306,984	448,192	407,622	815,483	714,606
Hawaii.....	-	-	-	-	-	-
Nevada.....	-	W	-	-	-	2,252
Oregon.....	-	-	-	-	-	-
Washington....	191,529	217,010	-	-	191,529	217,010
Total.....	570,234	544,950	448,518	407,988	1,018,752	952,938
U.S. Total.....	4,479,132	4,591,566	2,680,020	2,817,738	7,159,152	7,409,304

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Table 8. Sales of Natural Gas Liquids and Liquefied Refinery Gases for Gasoline Blending by Product Type, PAD District and State, 1991 and 1990 (Thousands of Gallons)

District & State	Butane		Pentanes Plus		Total	
	1991	1990	1991	1990	1991	1990
PAD Dist. I						
New England						
Connecticut	-	-	-	-	-	-
Maine	-	-	-	W	-	504
Massachusetts	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-
Vermont	-	-	-	-	-	-
Central Atlantic						
Delaware	-	W	-	-	-	5
Maryland/D.C.	-	-	-	-	-	-
New Jersey	W	W	-	-	921	8,425
New York	W	W	-	-	377	214
Pennsylvania	35,723	27,980	W	-	36,311	27,980
Lower Atlantic						
Florida	W	-	-	-	527	-
Georgia	-	-	-	-	-	-
North Carolina	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-
Virginia	-	-	-	-	-	-
West Virginia	-	-	-	-	-	-
Total	37,548	36,624	588	504	38,136	37,128
PAD Dist. II						
Illinois	472,813	404,190	W	W	518,799	428,963
Indiana	161,785	197,735	W	W	202,975	259,070
Iowa	-	-	-	-	-	-
Kansas	447,439	352,910	398,294	507,720	845,733	860,630
Kentucky	W	W	W	W	58,335	51,013
Michigan	47,537	53,221	W	W	49,716	54,977
Minnesota	W	W	-	-	17,912	15,630
Missouri	-	W	-	-	-	10
Nebraska	-	-	-	-	-	-
North Dakota	W	18,846	-	W	13,350	19,844
Ohio	43,192	76,188	-	-	43,192	76,188
Oklahoma	105,885	79,953	30,575	47,040	136,460	126,993
South Dakota	-	-	-	-	-	-
Tennessee	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-
Total	1,362,396	1,243,578	524,076	649,740	1,886,472	1,893,318
PAD Dist. III						
Alabama	W	4,705	W	W	5,040	5,133
Arkansas	-	W	-	-	-	5,436
Louisiana	989,953	865,261	280,915	270,395	1,270,868	1,135,656
Mississippi	W	W	W	W	218,975	169,259
New Mexico	8,827	15,125	8,717	13,859	17,544	28,984
Texas	1,348,621	1,512,140	915,718	1,058,002	2,264,339	2,570,142
Total	2,368,968	2,407,524	1,407,798	1,507,086	3,776,766	3,914,610
PAD Dist. IV						
Colorado	W	3,665	W	19,427	27,730	23,092
Idaho	-	-	-	-	-	-
Montana	W	120,199	-	W	100,263	120,577
Utah	87,529	65,763	72,282	29,760	159,811	95,523
Wyoming	11,220	31,545	17,992	24,607	29,212	56,152
Total	220,542	221,172	96,474	74,172	317,016	295,344
PAD Dist. V						
Alaska	-	-	W	W	932	326
Arizona	W	11,414	-	-	7,303	11,414
California	337,471	367,291	550,276	448,192	887,747	815,483
Hawaii	-	-	-	-	-	-
Nevada	-	-	-	-	-	-
Oregon	-	-	-	-	-	-
Washington	322,354	191,529	-	-	322,354	191,529
Total	667,128	570,234	551,208	448,518	1,218,336	1,018,752
U.S. Total	4,656,582	4,479,132	2,580,144	2,680,020	7,236,726	7,159,152

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

PRODUCT DESCRIPTIONS AND DEFINITIONS

ETHANE - A normally gaseous paraffinic compound (C2H6). Include ethane sold in an ethane-propane mix. Note: Report ethane-ethylene mixtures for chemical use under Section A 5. Subheading a. "Raw materials and Solvents for Chemical Plants."

PROPANE - Include all products covered by the Gas Processors Association (GPA) specifications for commercial and HD-5 propane including propane sold in ethane-propane and butane-propane mixes. Also include propylene in this category.

BUTANE - Include all products covered by GPA specifications for commercial butane including butane sold in a butane-propane mix. Also include isobutane and butylene in this category.

PENTANES-PLUS - A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Include isopentane, natural gasoline and plant condensate. Exclude field condensate which is mixed with crude oil and reported as part of crude oil and field condensate production to DOE.

LIQUEFIED REFINERY GASES (LRG)

Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reporting categories are ethane/ethylene, propane/propylene, normal butane/butylene. Excludes still gas used for chemical or rubber manufacture which is reported as a petrochemical feedstock and also excludes liquefied petroleum gases intended for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstock or other uses.

STILL GAS (REFINERY GAS)

Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is reported to DOE for petrochemical feedstock use and/or refinery fuel use, but they should not be reported on this survey form if used in the gaseous state.

RESIDENTIAL AND COMMERCIAL USES - Include liquefied petroleum gases sold for use in private households and commercial establishments such as motels, restaurants, retail stores, laundries, etc., primarily for use in space heating, water heating and cooking. *LP gases used for space heating and cooking in farm houses should be reported under FARM USES.*

INTERNAL-COMBUSTION ENGINE FUEL - Include liquefied gases for use in highway vehicles, forklifts, oil-field drilling and production equipment, etc. *LP gases used for tractors and irrigation engines and other agricultural vehicles should be reported under FARM USES.*

INDUSTRIAL USES - Include liquefied petroleum gases sold to manufacturing plants for such uses as standby fuel, space heating, flame cutting, metallurgical furnaces etc. Include sales to petroleum refineries for fuel use. For internal use, include NGLs and LRGs consumed by your company as fuel. *Sales or internal use of NGLs and LRGs for gasoline blending should not be reported in this category. Such sales or internal use should be reported in Section B2.*

GAS DISTRIBUTION COMPANIES - Include sales of ethane and liquefied petroleum gases sold to gas utility companies for use as a standby fuel or direct distribution in gas mains.

RAW MATERIALS AND SOLVENTS FOR CHEMICAL PLANTS - Include natural gas liquids or liquefied refinery gases sold or used internally as raw materials and solvents in the manufacture of chemicals. Include volumes used in the production of synthetic rubber. Also include refinery sourced propylene production. *Sales to chemical plants for use as plant fuel should be reported in the "industrial use" category.*

FARM USES - Include liquefied petroleum gases sold for use in tractors, irrigation engines, *space heating of buildings (including farm houses)*, cooking, crop drying, tobacco curing, flame cultivation, poultry breeding, and other agricultural applications.

ALL OTHER USES - Include natural gas liquids, and liquefied refinery gas sold or used for any purpose not covered in the above categories, including secondary recovery use. Include NGLs and LRGs for use as SNG feedstock. Sales to SNG plants for use as plant fuel should be reported in the "industrial use" category.

American Petroleum Institute
1220 L Street, Northwest
Washington, D.C. 20005